Financial Results
For the Fiscal Year ending December 31, 2016 - Consolidated

February 9, 2017
Tokyo Stock Exchange

Company name: Tokai Carbon Co., Ltd.
Security code: 5301
URL http://www.tokaicarbon.co.jp/
Representative Hajime Nagasaka, President and CEO
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Scheduled dates

Scheduled Date for Annual Meeting of Stockholders	March 29, 2017
Commencement of dividend payments:	March 30, 2017
Scheduled date for submission of annual securities report	March 29, 2017
Supplementary reference documents to support the financial statements	Yes
Explanatory meeting to discuss the financial statements will be held:	Yes (for institutional investors and analysts only)

１. Consolidated Financial Results for the Fiscal Year Ending December 31, 2016 (January 1, 2016 to December 31, 2016)

(Amounts rounded down to the nearest Millions of yen)

(1) Consolidated Operating Results (Percentage figures represent year-on-year changes)

	Net sales		Operating income		Ordinary income		Profit/(loss) attributable to owners of the parent company	
	millions of yen	%	millions of yen	%	millions of yen	%	millions of yen	%
As of December 31, 2016	88,580	(15.5)	1,131	(72.3)	1,702	(60.6)	(7,929) -	
As of December 31, 2015	104,864	(8.5)	4,088	10.4	4,317	3.3	2,484	(3.0)

Note: Comprehensive income
As of December 31, 2016 (10,647) million yen (-%)
As of December 31, 2015 (5,742) million yen (-%)

	Profit per share	Profit per share-fully diluted	Shareholders' equity profit ratio	Total assets ordinary income ratio	Net sales operating income ratio
	yen	yen	%	%	%
As of December 31. 2016	(37.20)	-	(6.8)	1.0	1.3
As of December 31, 2015	11.65	-	2.0	2.2	3.9

Reference: Equity in income (loss) of non-consolidated subsidiaries and affiliates
As of December 31, 2016 794 million yen
As of December 31, 2015 589 million yen

(2) Consolidated Financial Position

	Total assets	Net assets	Shareholders' equity ratio	Net assets per share
	millions of yen	millions of yen	%	Yen
As of December 31, 2016	158,824	112,989	69.9	520.69
As of December 31, 3015	184,074	124,971	66.8	576.57

Reference: shareholders' equity
As of December 31, 2016 110,990 million
As of December 31, 2015 122,915 million

(3) Consolidated Cash Flows Position

	Cash flows from operating activities	Cash flows from investing activities	Cash flows from financing activities	Cash and cash equivalents at end of the period
	Millions of yen	Millions of yen	Millions of yen	Millions of yen
As of December, 2016	17,505	(3,622)	(7,613)	28,521
As of December 2015	20,613	3,189	(14,926)	22,919

2. Dividends

	Annual dividend					Total dividend	Dividend Ratio (Consolidated)	Dividend Rate on Net Assets (Consolidated)
	End of 1st quarter	End of 2nd quarter	End of 3rd quarter	Year-end	Total			
	Yen	Yen	Yen	Yen	Yen	Millions of yen	%	%
As of December, 2015	-	3.00	-	3.00	6.00	1,279	51.5	1.0
As of December, 2016	-	3.00	-	3.00	6.00	1,279	-	1.1
Forecast for the year ending of 2017	-	4.00	-	4.00	8.00		24.4	

3. Forecast of Consolidated Earnings for the Fiscal Year Ending December 31, 2017 (January 1 to December 31, 2017)

(Percentage figures represent year-on-year changes)

	Net sales		Operating income		Ordinary income		Profit/(loss) attributable to owners of the parent company		Profit per share
	Millions of yen	%	Millions of yen	%	Millions of yen	%	Millions of yen	%	yen
Year ending of 2nd quarter (cumulative)	43,000	(4.2)	1,800	-	2,300	-	4,200	-	19.70
Full year	89.,000	0.5	5,200	359.5	6,100	258.3	7,000	-	32.84

*Notes

(1) Changes in significant subsidiaries during the period (that accompanied changes in the scope of consolidation): None

Newly consolidated: ___company (companies) (name of company)

Excluded from consolidation: ___company (companies) (name of company)

(2) Changes in accounting policies and estimates, and retrospective restatements

1) Changes in accounting policies due to revisions of accounting standards, etc. : Yes
2) Changes in accounting policies other than item 1) above : None
3) Changes in accounting estimates : None
4) Retrospective restatement : None

(3) Number of shares issued (common stock)

1) Number of shares issued at end of the period (including treasury stock):
2) Number of shares held in treasury at end of the period:
3) Average number of shares during the period (quarterly cumulative period)

As of December 31, 2016	224,943,104 shares	As of December 31, 2015	224,943,104 shares
As of December 31, 2016	11,782,847 shares	As of December 31, 2015	11,757,962 shares
As of December 31, 2016	213,176,528 shares	As of December 31, 2015	213,210,943 shares

(Reference)) Overview of non-consolidated results

Non-consolidated results for December 31, 2016 (From January 1, 2016 to December 31, 2016)

(1) Operating Results (Percentage figures represent year-on-year changes

	Net sales		Operating income		Ordinary income		Profit (loss)	
	Millions of yen	%	Millions of yen	%	Millions of yen	%	Millions of yen	%
As of December 31, 2016	46,125	(16.9)	(884)	-	157	(96.9)	(10,849)	
As of December 31, 2015	55,532	(10.4)	3,944	52.1	4,998	20.8	3,361	(7.0)-

	Net income per share	Net income per share--fully diluted
	yen	yen
As of December 31, 2016	(50.90)	-
As of December 31, 2015	15.77	-

(2) Financial position

	Total assets	Net assets	Shareholders' equity ratio	Net assets per share
	Millions of yen	Millions of yen	%	Yen
As of December 31, 2016	122,384	85,002	69.5	398.77
As of December 31, 2015	142,554	97,264	68,2	456.24

Note: Shareholders' equity As of December 31, 2016 85,002 millions of yen As of December 31, 2015 97,264 millions of yen

*Disclosing the status of conducting the "Year-end Review"

Submission of the financial results report is not required for the review process.

At the time that these financial results were released, the review process for disclosing consolidated financial statements under the Financial Instruments and Exchange Act had not been completed.

*Appropriate use of earnings forecasts and other important information

(Consideration of the matters such as descriptions about the future)

These materials contain various forward-looking statements and other forecasts regarding performance and other matters. Such statements are based on information available at the time of preparation as well as certain reasonable assumptions. Actual results may differ materially from those expressed or implied by forward-looking statements due to a range of factors. For the assumptions underlying the earnings forecasts presented and other information regarding the use of such forecasts, please refer to "1. Analysis of business performance and financial condition (1) Analysis of business performance" on page 2-4 in the "Attachments" section.

(How to obtain the supplementary document describing the quarterly results)

In order to explain the quarterly results, the Company is going to have an explanatory meeting for institutional investors and analysts on Thursday February 16, 2017. The Company will post the document for the meeting its website immediately after it is held.

○Table of contents for the “Attachments” section

1. Analysis of business performance and financial condition

(1) Analysis of business performance:

Though the world economy saw economic slowdowns in some emerging countries in the current consolidated fiscal year (January 1, 2016 to December 31, 2016), an overall underlying tone of recovery was seen in Europe and the United States. Yet, many uncertainties surround the global economy, and we must focus on where this recovery is leading us.

Under such circumstances, the Group has started the first year of the new three-year medium-term management plan T-2018. The key performance targets for the year 2018 being net sales of JPY 110,000 million, operating income of JPY 9,000 million, ROS (Return on Sales) of 8% or higher and, ROIC (Return on Invested Capital) of 6% or higher, the Group has been working towards establishing a growth base through structural reforms composed of "business restructuring" and "organizational transformation by changing the mindset". The policies of structural reform in 2016 included: ① reducing production capacity of isotropic graphite and narrowing the product line-up in the fine carbon business ② optimizing human resources ③ further downsizing and industrial reorganization of the graphite electrodes business ④ curtailing production capacity and shifting to a production system focusing on high value-added products in China in the carbon black business ⑤ reducing inventory by approximately JPY 8,000 million on a corporate-wide basis; and ⑥ improving internal communication by breaking down walls between divisions. While the Group recognizes that implementing measures as part of our structural reforms involves considerable pain, the Group has determined that these measures are inevitable for transforming the organization into a strong profit structure.

As a result of implementing these measures, the net sales of the consolidated fiscal year in review decreased 15.5% from the corresponding period of the previous fiscal year to JPY 88,580 million. However, the operating income decreased 72.3% from the corresponding period of the previous fiscal year to JPY 1,131 million. The ordinary income decreased 60.6% from the corresponding period of the previous fiscal year to JPY 1,702 million. The net loss attributable to owners of the parent company was JPY 7,929 million (the net profit attributable to owners of the parent company in the corresponding period of the previous fiscal year was JPY 2,484 million).

The performance of each of our business segments is given below.

Effective from the fiscal year under review, the Group reorganized its reportable operating segment and changed the measurement method of operating segment profit or loss as stated in Notes (Note on segment information, etc.). Comparative figures in the previous year were reclassified to conform to the new segment classification in the current year for the year on year calculation.

<u>Carbon Black</u>

The selling price of carbon black fell due to decline in the price of crude oil, thus causing a fall in revenue from the corresponding period of the previous fiscal year. Though there were indications that the crude oil price will increase in the current period, it did not return to the standard price of the previous period. Meanwhile, the sales figures have shown a steady performance, and due the reduced labor and amortization expenses in Chinese and Thai subsidiaries the margins have improved substantially thus drastically increasing the profits.

As a result, the net sales from the carbon black business have decreased 18.3% from the corresponding period of the previous fiscal year to JPY 604 million, whereas the operating income has increased 305.9% from the corresponding period of the previous year to JPY 4,755 million.

<u>Graphite Electrodes</u>

The selling price continued to go down as the competition remained severe because of no improvements seen in the structural imbalance in supply and demand of graphite electrodes, affected by declining production of electric arc furnace steel in all regions, which can be traced back to over-production of steel in China. Additionally, the yen continued to go up, the net sales and the operating income drastically have reduced.

As a result, the net sales from the graphite electrode division decreased 23.2% from the corresponding period of the previous fiscal year to JPY 20,714 million, and the operating loss was JPY 1,290 million (the operating income in the corresponding period of the previous fiscal year was JPY 2,539 million).

<u>Fine Carbon</u>

The graphite markets supplying for semiconductor markets and general industries have been growing steadily, and the solar battery market is recovering centering around China. At the same time, supply capacity of graphite used in special carbon is exceeding the demand as before, and the markets are facing severe competition. Under these circumstances, the fine carbon division has considered streamlining which involves reducing the human resources. The division has not only been curtailing the production capacity, but has also adopted policies of narrowing down the product line-up and inventory. In the period under review, the operating income reduced substantially owing to approximately JPY 800 million towards provision for allowance for doubtful accounts resulting from the deteriorating business performance of trade partners and an appraisal loss of around JPY 300 million against long-term inventory.

As a result, the net sales from the fine carbon division decreased 13.7% from the corresponding period of the previous fiscal year to JPY 12,925 million, and the operating loss was JPY 1,825 million (the operating income in the corresponding period of the previous fiscal year was JPY 112 million).

Industrial Furnaces and Related Products

The net sales of the industrial furnaces division increased as compared to the corresponding period of the previous fiscal year owing to the capital investment from some energy-related industries, in addition to the fact in addition to the fact that the level of sales in IT-related industries, which are the main sources of demand for this segment, transitioned in the same way as it did in the previous period. In the area of heat generator and other products, the net sales have picked up for electrical power infrastructure in China and other emerging countries. However, the decreased demand of refractories adversely affected the net sales, reducing them down to lesser than those in the corresponding period in the previous fiscal year. The operating income also decreased from the corresponding period in the previous fiscal year due to disposal of inventory assets and appropriation of warranty expense.

As a result, the net sales of industrial finances decreased 0.6% from the corresponding period of the previous fiscal year to JPY 5,243 million, and the operating income decreased 23.7% from the corresponding period of the previous year to JPY 516 million.

Other Operations

Friction Materials:

The sales figures of friction materials dropped as compared to the corresponding period of the previous year due to the declined production quantity of construction machinery caused by sluggish demand in the Chinese markets and due to the reduced production of agricultural machinery.

As a result, the net sales of friction materials division decreased 7.6% from the corresponding period of the previous fiscal year to JPY 7,606 million.

Others:

Apart from these, owing to the increase in sales figures of the negative electrode material used in lithium ion secondary batteries, the net sales of real estate rentals and other sectors increased 32.7% from the corresponding period of the previous fiscal year to JPY 4,325 million.

Thus, the net sales of friction materials division increased 3.8% from the corresponding period of the previous fiscal year to JPY 11,932 million and the operating income decreased 23.3% from the corresponding period of the previous fiscal year to JPY 522 million.

(Forecast for next term)

Assuming 1 USD = 105 JPY, the Group predicts a net sales of JPY 89,000 million, operating income of JPY 5,200 million, ordinary income of JPY 6,100 million, and net income attributable to owners of parent is JPY 7,000 million in the next term.

The balance from cash and cash equivalents at the end of the next term is predicted to JPY 24,000 million.

(2) Analysis of financial condition

(Assets, debts, and net assets)

① Assets

The total assets at the end of current consolidated fiscal year decreased by JPY 25,250 million from the end of previous consolidated fiscal year to JPY 158,824 million.

Due to the decrease in inventories and notes and accounts receivable-trade, the current assets have decreased JPY 10,322 million from the end of previous consolidated fiscal year to JPY 77,645 million. Due to the decrease in tangible fixed assets and intangible fixed assets, the fixed assets have decreased by JPY 14,928 million from the end of previous consolidated fiscal year to JPY 81,178 million.

② Liabilities

The total liabilities at the end of current consolidated fiscal year decreased by JPY 13,268 million from the end of previous consolidated fiscal year to JPY 45,834 million.

Though the current portion of long-term debts increased, the decrease in short-term loans payable and income tax payable reduced the current debts to JPY 29,028 million, which is JPY 2,098 million lesser than the debts at the end of previous consolidated fiscal year. Due to a decrease in long-term debts, the fixed liabilities decreased by JPY 11,169 million from the end of the previous consolidated fiscal year to JPY 16,806 million.

③ Net sales

Due to a decrease in retained earnings and foreign currency translation adjustments, the net assets at the end of current consolidated year decreased by JPY 11,981 million from the end of previous consolidated fiscal year to JPY 112,989 million.

As a result, the capital adequacy ratio increased by 3.1 points from the end of previous consolidated fiscal year to 69.9%

(Cash flow conditions)

The cash and cash equivalents at the end of current consolidated fiscal year increased by JPY 5,602 million from the end of previous consolidated fiscal year to JPY 28,521 million. The various cash flow conditions in the current consolidated fiscal year and factors responsible for them are as follows:

① Cash flows from operating activities

As for the capital used in business operations, though the reduction in inventories caused a rise in income, the net loss before taxes reduced the income eventually.

The income decreased by JPY 3,107 million from the previous consolidated fiscal year to JPY 17,505 million.

② Cash flows from investment activities

The income decreased due to decline in the sales of investment securities. Thus, an expenditure of JPY 3,622 million was incurred from the income of JPY 3,189 million in the previous term.

③ Cash flows from financial activities

In addition to the expenses incurred for repayment of short-term and long-term debts, reduction in profit owing to long-term debts was reported. The expenditure was JPY 7,313 million, which is JPY 7,613 million less than that in the previous term.

(Transition of cash flow-related indexes)

	As of December 31, 2012	As of December 31, 2013	As of December 31, 2014	As of December 31, 2015	As of December 31, 2016
Capital adequacy ratio	66.1	66.0	61.8	66.8	69.9
Capital adequacy ratio based on market price	46.0	42.7	36.0	39.6	50.7
Debt-to-cash-flow ratio	2.4	2.2	3.2	1.2	1.0
Interest coverage ratio	14.6	17.1	16.3	35.0	40.7

(Note) 1 All indexes are calculated using the following mathematical formulae, based on the consolidated financial data:

Capital adequacy ratio: Net worth/Total assets

Capital adequacy ratio based on market price: Market capitalization/Total assets

Debt-to-cash-flow ratio: Interest-bearing debt/Cash flow from operating activities

Interest coverage ratio: Cash flow from operating activities/Interest payments

2. Market capitalization is a product of closing stock price at the year-end and number of outstanding stock (excluding treasury stock).
3. Interest-bearing debt refers to all such liabilities allocated in the consolidated balance sheet for which interest is payable.
4. The "cash flows from operating activities" and "interest paid" allocated in the consolidated cash flow statement have been used to calculate the operating cash flow and interest paid.

(3) Basic policies related to profit allocation and dividends for current/next term

To improve the corporate value over medium to long term, the Company believes that returning profits to its shareholders is an important management task, and by taking into account the performance and outlook of each term, as well as investment plan and cash flow conditions, the Company shall strive to pay a stable and continuous dividend with a consolidated dividend ratio of 30%.

The year-end dividend shall be 3 JPY per share, same as the previous term. Thus, the annual dividend amount after adding the interim dividend shall be 6 JPY per share.

The total dividend for the next term is planned to be 8 JPY per share taking into account the interim dividend of JPY 4 per share and the year-end dividend of JPY 4 per share.

2. Organization of the Group

The Group (the Company and its affiliated companies) consists of the Company (Tokai Carbon Co., Ltd.), its 26 subsidiaries, and 5 affiliated companies, and the position of the Company and its affiliates in the main business fields and the applicable business fields is as follows:

The classification for the following 5 industries is the same as the segmentation given in "5. Consolidated Financial Statement (5) Notes to the Consolidated Financial Statements".

The Company has changed the classification of the reportable segments from the current consolidated fiscal year. For details, see "5. Consolidated Financial Statement (5) Notes to the Consolidated Financial Statement".

<u>Carbon Black</u>

The Company, THAI TOKAI CARBON PRODUCT CO., LTD., Tokai Carbon (Tianjin) Co., Ltd., and Cancarb Limited manufacture and sell Carbon Black (used in rubber products, black pigments, and electric conductors).

Tokai Transportation Co., Ltd. handles the general freight car transportation business and freight handling business. The Company delegates the transportation and packaging of products to Tokai Transportation Co., Ltd.

<u>Graphite Electrodes</u>

The Company manufactures and sells graphite electrodes used in electrical steelmaking furnaces.

TOKAI CARBON ELECTRODE SALES INC. and TOKAI CARBON ELECTRODE SALES L.L.C. engages into sale of graphite electrodes and other activities while

TOKAI ERFTCARBON GmbH manufactures and sells graphite electrodes used in electrical steel furnaces.

Further, the consolidated company SGL TOKAI CARBON LTD. SHANGHAI processes and sells graphite electrodes.

<u>Fine Carbon</u>

The Company manufactures and sells fine carbon (special carbon products) and motor brushes. The Company has delegated the processing of material such as fine carbon to Tokai Carbon Co., Ltd. and Oriental Industry Co., LTD. Further, Tokai Carbon Co., Ltd. also sells fine carbon, whereas Oriental Industry Co., LTD. manufactures and sells the lead used in pencils.

Tokai Carbon (Dalian) Co., Ltd. processes and sells fine carbon, TOKAI CARBON U.S.A.,INC. manufactures and sells fine carbon, TOKAI CARBON EUROPE GmbH, TOKAI CARBON EUROPE LTD., TOKAI CARBON ITALIA S.R.L. and TOKAI CARBON DEUTSCHLAND GmbH handle businesses related to fine carbon.

Further, the companies TOKAI CARBON KOREA CO., LTD., MWI,INC., and SCHUNK TOKAI SCANDINAVIA AB jointly manufacture and sell fine carbon, whereas SGL TOKAI PROCESS TECHNOLOGY PTE.LTD. handles the businesses related to impervious graphite.

<u>Industrial Furnaces and Related Products</u>

TOKAI KONETSU KOGYO CO., LTD. manufactures and sells the products such as industrial electric furnaces, gas furnaces, silicon carbide and alumina refractories, fireproof insulation bricks, and ceramic resistors. The companies EREMA SANGYO Co., LTD., Shanghai Donghai Gaore Fire-Resistant Products Limited Company, and TOKAI KONETSU (SUZHOU) CO., LTD are involved in the field of Industrial Furnaces.

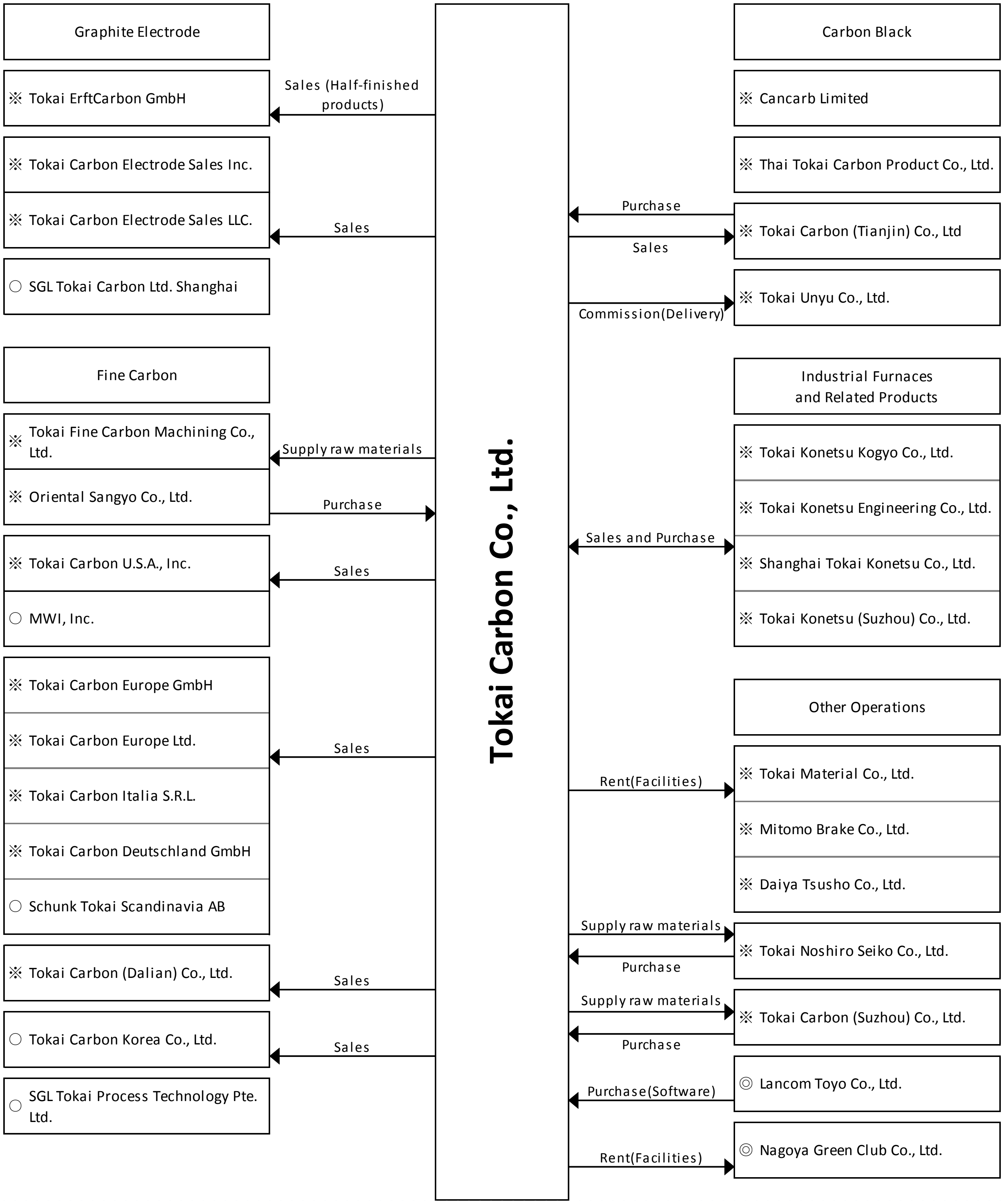
<u>Other Operations</u>

The Company manufactures and sells friction material, and manages real estate rental business. TOKAI MATERIAL Co., Ltd, Mitomo Brake Co., Ltd., Daiya Tsusho Co Ltd, TOKAI NOSHIRO Precision Industries Co., Ltd, and Donghai Tansu (Suzhou) Co., Ltd. manage friction materials-related businesses.

LANCOM TOYO CO., LTD. develops and sells computer software.

Nagoya Green Club Co., Ltd. manages golf driving ranges.

The outline diagram for the above items is given below.



(Note) 1 ※ indicates consolidated subsidiaries, ◎ indicates non-consolidated subsidiaries to which equity method is inapplicable, ○ indicates affiliated companies to which equity method is applicable.

3. Management policy

(1) The basic management policy of the Company

With "Bond of Trust" as its corporate philosophy, the Company Group regards "Creating Value", "Fairness", and “Environmental Harmony", "Globalism" as the fundamental guidelines of its actions, and supplies high-quality products, mainly made of carbon, to domestic and overseas markets with the aim of becoming a Global Supplying Leader of Carbon Materials.

Through these corporate activities, the Group will strive to expand its management foundation, optimize the use of management resources, and enhance cost competitiveness and technological development capability, and permanently improve profitability to fulfill the expectations of our various stakeholders, such as shareholders, clients, employees, or regional companies, by contributing towards the development of the society as a trusted company.

(2) Target management guidelines

The Group regards its Net sales, ROS (Return on Sales), and ROA (Return on Assets) as important management guidelines that indicate the outcome of business operations. However, the Group also aims to enhance its capital efficiency by adding ROIC (Return on Invested Capital) to these indicators as a part of its mid-term 3-year management plan T-2018 starting from FY2016.

(3) Mid-to-long term management strategies

The Group has formulated a mid-term 3-year management plan T-2018 starting from FY2016. The performance target for FY2018 are net sales of JPY 110,000 million, operating income of JPY 9,000 million, ROS (Return on Sales) of 8% or higher, and ROIC (Return on Invested Capital) of 6% or higher. The Group strove for 2016 to be a year of thorough structural reforms composed of "business restructuring" and "internal awareness reforms". It also strengthened corporate governance through activities such as optimization of business facilities and personnel, thorough curtailment of inventory, withdrawal from non-core businesses, along with personnel exchange across departments and utilizing external resources. From 2017 onwards, the Group shifted its focus from "business reforms" to "growth strategies" and will continue to pay attention to expanding the current enterprises and nurturing the new ones.

(4) Issues to be dealt by the Company

Though the Japanese economy is expected to recover gradually against the background of the global economy, we must be aware of the risk factors such as the effects of USA President-elect’s policy administration on the global economy, the trend of Chinese economy, increase in terrorist threats, and the problems arising due to Brexit. As for the industries relevant to the Company, the business environment is continually becoming more competitive owing to the decline in operating ratio of electric furnace steel caused by stacking of steel inventory in China and amplification of exports of Chinese products due to excess supply capacity.

Even under such difficult conditions, the Group worked towards structural reforms consisting of "business restructuring" and "internal awareness reforms" in the current term, which forms the first year of mid-term 3-year management plan T-2018. As mentioned before, the Group was able to yield results in strengthening the management foundation and enhancing the capital efficiency while focusing on business reconstruction. Hereafter, the Group will adopt the following approach to achieve its mid-term management target for FY2018: JPY 110,000 million, operating income of JPY 9,000 million, ROS (Return on Sales) of 8% or higher, and ROIC (Return on Invested Capital) of 6% or higher.

In addition to the "internal consciousness reform", the company has shifted its attention from structural reform to growth strategies in the year 2017 while working towards "restoration of technical expertise" with a focus on the technical headquarters which were newly established in the year 2015 in order to link the production know-how across all the divisions. Though the graphite electrode and fine carbon divisions, which are facing harsh business conditions, need to continually restructure the business to improve their yield ability, the Group also aims to actively work towards enhancing the next-generation products industry and creating new ventures based on the understanding that, for further expansion of the Company’s business, it is necessary to explore and venture into new business domains in addition to planning growth strategies for existing ventures.

As we turn our gaze towards the issues of business administration, we understand that a compliance-focused management is the basic requirement. Thus, to fulfill this requirement while coping with the business environment of great uncertainty, the risk-management system needs to be upgraded and expanded to cover both internal and external group companies. To achieve sustained growth as a listed enterprise, the Board of Directors shall strive towards bolstering the corporate governance by building a viable management and supervision system. Moreover, the Group shall take a straightforward approach to nurture and strengthen the human resources required to tackle such varied issues.

(5) There are no other major items or applicable items concerning company administration.

4. Basic approach for selecting the accounting standards

At present, the Group has the policy to create the financial statements based on Japanese standards considering the possibility of term comparison and comparison within companies. The Group has adopted a policy of applying the International Financial Reporting Standards (IFRS) as suitable on considering the domestic and overseas circumstances.

5. Consolidated Financial Statements

（１） Consolidated Balance Sheets

(Millions of yen)

	End of the previous fiscal year (As of December 31, 2015)	End of the fiscal year under review (As of December 31, 2016)
Assets		
Current assets		
Cash and cash equivalents	16,045	16,528
Notes and accounts receivable	26,897	24,220
Securities	7,000	12,000
Merchandise and finished goods	13,828	7,516
Work in process	12,182	7,886
Raw materials and supplies	8,241	5,330
Deferred tax assets	1,384	1,677
Other	2,509	3,066
Allowance for doubtful accounts	△122	△580
Total current assets	87,968	77,645
Fixed assets		
Tangible fixed assets		
Buildings and structures, net	18,282	12,965
Machinery, equipment and vehicles, net	26,576	20,496
Furnaces, net	998	744
Land	6,703	5,747
Construction in progress	3,070	1,214
Other, net	997	1,953
Total tangible fixed assets	56,629	43,122
Intangible fixed assets		
Software	404	559
Goodwill	6,135	5,604
Customer-related assets	3,896	3,612
Other	888	758
Total intangible fixed assets	11,324	10,534
Investments and other assets		
Investment securities	24,681	24,377
Net defined benefit asset	1,993	1,923
Deferred tax assets	606	564
Other	922	702
Allowance for doubtful accounts	△51	△46
Total investment and other assets	28,153	27,521
Total fixed assets	96,106	81,178
Total assets	184,074	158,824

(Millions of yen)

	End of the previous fiscal year (From January 1 to December 31, 2015)	End of the fiscal year under review (From January 1 to December 31, 2016)
Liabilities		
Current liabilities		
Notes and accounts payable	9,196	7,471
Electronically recorded obligations	2,201	2,120
Short-term borrowings	7,469	2,894
Current portion of long-term debt within one year	2,068	10,016
Income taxes payable	3,540	841
Consumption taxes payable	496	356
Accrued expenses	1,366	1,235
Reserve for bonuses	212	194
Other	4,575	3,897
Total current liabilities	31,126	29,028
Fixed liabilities		
Long-term debt	14,398	4,137
Deferred tax liabilities	7,872	6,037
Net defined benefit liability	3,816	3,840
Reserve for directors’ retirement benefits	107	92
Reserve for executive officers’ retirement benefits	35	42
Provision for environment and safety measures	469	473
Other	1,276	2,182
Total fixed liabilities	27,976	16,806
Total liabilities	59,103	45,834
Net assets		
Shareholders’ capital		
Common stock	20,436	20,436
Additional paid-in capital	17,502	17,502
Retained earnings	78,214	69,005
Treasury stock	△7,243	△7,250
Total shareholders’ capital	108,910	99,693
Other accumulated comprehensive income		
Net unrealized gains/losses on other securities	9,392	9,191
Deferred gains or losses on hedges	△0	—
Foreign currency translation adjustments	3,782	1,356
Remeasurements of defined benefit plans	830	748
Total other accumulated comprehensive income	14,004	11,296
Non-controlling interests	2,055	1,998
Total net assets	124,971	112,989
Total liabilities and net assets	184,074	158,824

(2) Consolidated Statement of Operations and Comprehensive income (Consolidated Statements of Operations)

(Millions of yen)

	Previous fiscal year (From January 1 to December 31, 2015)	End of the fiscal year under review (From January 1 to December 31, 2016)
Net sales	104,864	88,580
Cost of sales	84,904	72,051
Gross profit	19,960	16,529
Selling, general and administrative expenses		
Selling cost	4,865	4,762
General administrative cost	11,005	10,635
Total of selling cost and general administrative cost	15,871	15,398
Operating income (loss)	4,088	1,131
Non-operating income		
Interest income	86	53
Dividend income	591	447
Rental income	300	293
Equity in income of non-consolidated subsidiaries and affiliates	589	794
Other non-operating income	649	505
Total non-operating income	2,217	2,094
Non-operating expense		
Interest expense	595	418
Compensation expenses	210	60
Foreign exchange losses	383	224
Other non-operating expense	799	820
Total non-operating expenses	1,989	1,523
Ordinary income (loss)	4,317	1,702
Extraordinary income		
Gain on sales of non-current assets	1,003	1,380
Gain on sales of investment securities	5,814	—
Gain on liquidation of subsidiaries and associates	189	—
Total extraordinary income	7,006	1,380
Extraordinary losses		
Impairment loss	*1 4,326	*1 10,707
Special severance payments	—	*2 314
Demolition expenses	106	—
Contribution for liquidation of subsidiaries and	86	—
Loss on sales of shares of subsidiaries and associates	78	—
Total extraordinary losses	4,597	11,021
Income (loss) before income taxes	6,726	△7,938
Income taxes, inhabitants tax, and enterprise taxes	4,891	1,468
Income taxes adjustments	△545	△1,535
Total income taxes	4,345	△67
Profit/(loss)	2,381	△7,871
Loss attributable to non-controlling shareholders	△103	58
Profit/(loss) attributable to owners of the parent	2,484	△7,929

(Consolidated Statements of Comprehensive Income)

(Millions of yen)

	The previous fiscal year (From January 1 to December 31, 2015)	The fiscal year under review (From January 1 to December 31, 2016)
Profit/(loss)	2,381	△7,871
Other comprehensive income		
Valuation difference on available-for-sale securities	△2,558	△198
Deferred gains or losses on hedges	△0	△0
Foreign currency translation adjustment	△5,534	△2,101
Remeasurements of defined benefit plans	24	△81
Share of other comprehensive income of associates accounted for using equity method	△54	△394
Total other comprehensive income	△8,124	△2,776
Comprehensive income	△5,742	△10,647
(Breakdown)		
Comprehensive income attributable to owners of The parent	△5,487	△10,638
Comprehensive income attributable to non-controlling shareholders	△254	△9

(3) Consolidated statements of changes in net assets

The previous fiscal year (From January 1 to December 31, 2015)

(Millions of yen)

	Shareholders' capital				
	Common stock	Additional paid-in capital	Retained earnings	Treasury stock	Total shareholders' capital
Opening balance of current period	20,436	17,502	77,295	(7,227)	108,006
Cumulative effect of changes in accounting policies			(295)		(295)
Restated balance after changes in accounting policies	20,436	17,502	76,999	(7,227)	107,710
Changes of items during the period					
Surplus dividend			(1,279)		(1,279)
Net income attributable to parent company			2,484		2,484
Purchase of treasury shares				(15)	(15)
Disposal of treasury shares			(0)	0	0
Change of scope of consolidation			9		9
Net changes of items other than shareholders' equity					
Total of changes of items during the period			1,215	(15)	1,199
Balance at the end of current period	20,436	17,502	78,214	(7,243)	108,910

	Other accumulated comprehensive income					Non-controlling interests	Total net assets
	Net unrealized gains/losses on other securities	Deferred gains or losses on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total other accumulated comprehensive income		
Opening balance of current period	11,958		9,212	806	21,977	2,359	132,343
Cumulative effect of changes in accounting policies							(295)
Restated balance after changes in accounting policies	11,958		9,212	806	21,977	2,359	132,047
Changes of items during the period							
Surplus dividend							(1,279)
Net income attributable to parent company							2,484
Purchase of treasury shares							(15)
Disposal of treasury shares							0
Change of scope of consolidation							0
Net changes of items other than shareholders' equity	(2,566)	(0)	(5,430)	24	(7,972)	(303)	(8,276)
Total of changes of items during the period	(2,566)	(0)	(5,430)	24	(7,972)	(303)	(7,076)
Balance at the end of current period	9,392	(0)	3,782	830	14,004	2,055	124,971

Consolidated fiscal year under review (From January 1 to December 31, 2016)

(Millions of yen)

	Shareholders' capital				
	Common stock	Additional paid-in capital	Retained earnings	Treasury stock	Total shareholder's capital
Opening balance of current period	20,436	17,502	78,214	(7,243)	108,910
Cumulative effect of changes in accounting policies					
Restated balance after changes in accounting policies	20,436	17,502	78,214	(7,243)	108,910
Changes of items during the period					
Surplus dividend			(1,279)		(1,279)
Net income attributable to parent company			(7,929)		(7,929)
Purchase of treasury shares				(8)	(8)
Disposal of treasury shares			(0)	0	0
Change of scope of consolidation					
Net changes of items other than shareholders' capital					
Total of changes of items during the period			(9,209)	(7)	(9,216)
Balance at the end of current period	20,436	17,502	69,005	(7,250)	99,693

	Other accumulated comprehensive income					Non-controlling interests	Total net assets
	Net unrealized gains/losses on other securities	Deferred gains or losses on hedges	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total other accumulated comprehensive income		
Opening balance of current period	9,392	(0)	3,782	830	14,004	2,055	124,971
Cumulative effect of changes in accounting policies							-
Restated balance after changes in accounting policies	9,392	(0)	3,782	830	14,004	2,055	124,971
Changes of items during the period							
Surplus dividend							(1,279)
Net income attributable to parent company							(7,929)
Purchase of treasury shares							(8)
Disposal of treasury shares							0
Change of scope of consolidation							
Net changes of items other than shareholders' capital	(200)	0	(2,425)	(81)	(2,708)	(57)	(2,765)
Total of changes of items during the period	(200)	0	(2,425)	(81)	(2,708)	(57)	(11,981)
Balance at the end of current period	9,191	-	1,356	748	11,296	1,998	112,989

(3) Consolidated Statement of Cash Flows

(Millions of yen)

	Previous fiscal year (From January 1 to December 31, 2015)	End of the fiscal year under review (From January 1 to December 31, 2016)
Cash flows from operating activities		
Net income/(loss) before income taxes	6,726	△7,938
Depreciation and amortization	9,242	8,124
Impairment loss	4,326	10,707
Demolition expenses	106	-
Loss on sales of investment securities (triangle ‘△’ indicates gain)	△5,817	△13
Loss for liquidation of subsidiaries and associates (triangle ‘△’ indicates gain)	△189	-
Contribution for liquidation of subsidiaries and associates	86	-
Loss on sales of shares of subsidiaries and associates (triangle ‘△’ indicates gain)	78	-
Special severance payments	-	314
Loss on sales of tangible assets (triangle ‘△’ indicates gain)	△1,070	△1,383
Amortizationi of goodwill	426	372
Increase (decrease) in allowance for doubtful accounts (triangle ‘△’ indicates decrease)	△25	429
Increase (decrease) in reserve for bonuses	13	△14
Increase (decrease) in net defined benefit liability (triangle ‘△’ indicates decrease)	△24	65
Decrease (increase) in net defined benefit assets (triangle ‘△’ indicates increase)	△130	70
Increase (decrease) in reserve for directors’ retirements’ benefit	△11	△14
Increase (decrease) in provision for environment and safety measures (triangle ‘△’ indicates loss)	△8	4
Interest and dividends income	△678	△500
Interest paid	595	418
Foreign exchange (gain) losses	25	30
Equity in income (loss) of non-consolidated	△589	△794
Increase (decrease) in trade receivables (triangle ‘△’ indicates increase)	6,300	2,179
Increase (decrease) in inventories (triangle ‘△’ indicates increase)	5,698	12,611
Increase (decrease) in trade payables (triangle ‘△’ indicates decrease)	△4,398	△1,440
Increase (decrease) in accrued expenses (triangle ‘△’ indicates decrease)	145	△101
Increase (decrease) in account payables (triangle ‘△’ indicates a decrease)	70	△441
Increase (decrease) in advance payments (triangle ‘△’ indicates an increase)	276	△655
Increase (decrease) in consumption taxes payables (triangle ‘△’ indicates a decrease)	182	△140

(Millions of yen)

	Previous fiscal year (From January 1 to December 31, 2015)	End of the fiscal year under review (From January 1 to December 31, 2016)
Other	948	△164
Subtotal	22,305	21,724
Interest income and dividends received	875	597
Interest paid	△589	△429
Income taxes paid	△1,977	△4,149
Special severance payments	-	△236
Net cash provided by (used in) operating	20,613	17,505
Cash flows from investing activities		
Payment into time deposits	△245	△0
Proceeds from withdrawal of time deposits	242	108
Net increase (decrease) in short-term borrowings	4	39
Purchase of tangible fixed assets	△5,909	△5,168
Proceeds from tangible fixed assets	1,699	1,610
Purchased of intangible assets	△152	△227
Proceeds from sales of investment securities	7,694	15
Payments for sales of investments in subsidiaries	△44	-
Payment on sales of shares of subsidiaries and associates	△86	-
Other	△14	△1
Cash flow from investing activities	3,189	△3,622
Cash flows from financing activities		
Net increase (decrease) in short-term borrowings (triangle ‘△’ indicates decrease)	△11,452	△4,156
Income in log-term debt	4,000	-
Repayment of long-term debt	△6,071	△2,068
Payment of dividend	△1,279	△1,279
Payment attributable to non-controlling shareholders	△49	△47
Others	△73	△61
Cash flows from financing activities	△14,926	△7,613
Effect of exchange rate change on cash and cash equivalents	△695	△667
Increase (decrease) in Cash and cash equivalents (triangle ‘△’ indicates decrease)	8,180	5,602
Cash and cash equivalents at beginning of the period	14,738	22,919
Cash and cash equivalents at beginning of the period	22,919	28,521

(5) Notes to the Consolidated Financial Statements

(Notes on the Going-concern Assumption)

Not applicable

(Significant Matters for Preparation of Consolidated Financial Statements)

1. Matters concerning scope of consolidation

(1) Number of consolidated subsidiaries 24

The names of consolidated subsidiaries are mentioned in "2. Organization of the Group", and hence omitted here.

(2) Names of non-consolidated subsidiaries:

Nagoya Green Club Co., Ltd. and LANCOM TOYO CO., LTD.

(Reason for exclusion of subsidiaries from consolidation)

The size of each of the non-consolidated subsidiaries is small, and each company’s total assets, sales and fiscal year profit or loss (amount corresponding to equity) and retained earnings (amount corresponding to equity) are small in size and do not have a material effect on the consolidated financial statements

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2. Matters concerning application of equity method

(1) Number of affiliated companies accounted for by the equity method 5

Names of the affiliated companies

TOKAI CARBON KOREA CO., LTD., SGL TOKAI CARBON LTD.SHANGHAI, MWI,INC., SGL TOKAI PROCESS TECHNOLOGY PTE.LTD., SCHUNK TOKAI SCANDINAVIA AB

(2) Non-consolidated companies not accounted for using equity method (Nagoya Green Club Co., Ltd., and LANCOM TOYO CO., LTD.) are out of scope of application of the equity method because they do not have a major effect on items such as consolidated net income and retained earnings and are not important as a whole.

(3) If a company is accounted for using equity method and its fiscal year-end differs from the consolidated fiscal year-end, then the financial statements of the company's fiscal year are used.

3. Matters concerning fiscal years of consolidated subsidiaries

The fiscal year-ends of the consolidated subsidiaries is the same as the consolidated fiscal year-end.

4. Matters concerning accounting policies

(1) Valuation standards and methods for significant assets

① Marketable securities

Available-for-sale securities

Securities with market value

Market value method based on the market price as of the last day of the fiscal period (All valuation gains or losses are treated as a component of net assets, with the cost of securities sold calculated according to the moving-average method).

Securities without market value

Based on the moving average cost method.

② Inventories

The Company and its domestic consolidated subsidiaries adopt cost method based on monthly average method (values in the balance sheet are subject to the book value reduction method based on a decline in profitability.) and the overseas consolidated subsidiaries principally use lowest cost accounting based on first in first out method.

③ Derivatives

Based on market value method.

(2) Depreciation methods applicable to significant fixed assets

① Tangible fixed assets (excluding leased assets) The Company and its domestic consolidated subsidiaries mainly use the declining balance method. However, the accounting of buildings (excluding auxiliary facilities) acquired on or after April 1, 1998 and auxiliary facilities and structures acquired on or after April 1, 2016 is based on the straight-line method. Overseas consolidated subsidiaries mainly use the straight-line method.

The useful life of each of these structures is as follows:

Buildings and structures	2 to 60 years
Machinery, equipment, and vehicles	2 to 22 years
Furnaces	8 to 10 years

② Intangible fixed assets (excluding leased assets)

Based on straight-line method.

The Company and its domestic consolidated subsidiaries amortize the software for internal use on a straight-line basis over the period of internal use (5 years).

The client-related assets are amortized based on the straight-line method over the projected profit-making period (17 years) on the basis of which compensation is calculated.

③ Leased assets Depreciation is calculated by using the straight-line method which considers the residual value to be zero and treats the lease term as the useful life of the asset.

(3) Valuation basis for significant allowances

① Allowance for doubtful receivables: To provide for losses due to uncollectible general accounts receivables, such allowance is calculated based on reasonable standards such as historical collection losses. For specific accounts receivables such as doubtful accounts receivables, a case-by-case review is conducted and an estimation of the uncollectible amount is recorded.

② Reserve for directors' retirement benefits: To provide for the retirement benefits of the directors, the Company and its domestic subsidiaries record the required amount at the end of the consolidated fiscal year based on the internal rules for payment of directors' retirement benefits.

(Additional information) In the Company's 144th annual meeting of stockholders held on March 30, 2006, it was decided that the system of retirement benefits for directors be abolished, and the retirement benefit amount corresponding to the period spent in the office till that day be paid to the directors and auditors at the time of their retirement.

The balance amount of the Company's reserve for directors' retirement benefits payable at the end of the current consolidated fiscal year is the estimated amount payable to the directors and auditors who are presently holding the office.

③ Reserve for executive officers' retirement benefits: To provide for the retirement benefits payable to the company executives, directors, and advisors, the required amount is allocated at the end of the current consolidated fiscal year based on the internal rules.

④ Provision for environment and safety measures

As a provision for expenses such as PCB waste disposal expenses based on "Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes", an amount that can be reasonably estimated to be incurred by the end of the fiscal year is recorded.

(4) Methods of accounting retirement benefits

① Period allocation method of projected retirement benefits to be incurred: To calculate the retirement benefit obligations, the method based on the benefit formula is used to allocate the projected retirement benefits for the years of service up to the end of the current consolidated fiscal year.

② Recognition method for actuarial gains and losses and prior service cost: Prior service costs are treated as a lump-sum expense in the fiscal year of their occurrence. Actuarial gains and losses are amortized by the straight-line method over a certain period of years (10 years), which is within the average remaining service period of the employees, commencing from the succeeding fiscal year.

③ Adoption of simplified methods of small-scale businesses: Some consolidated subsidiaries have adopted simplified method of calculating retirement benefit liability and retirement benefit expenses by considering the retirement benefit liability as the amount required to be paid if the employees retires voluntarily at the end of the term.

(5) Conversion criteria for major assets or liabilities in foreign companies into Japanese currency: Monetary credits and debts of foreign currencies are converted into Japanese currency by using the spot exchange rates on the day of consolidated account settlement, and the difference arising from such settlement is processed as profit or loss. Furthermore, the assets and liabilities of the controlled foreign corporations are converted into Japanese currency at the spot exchange rate on the fiscal year closing date, the earnings and costs are converted into Japanese currency by using the average market price during the period, and the translation difference is accounted for by including the foreign currency translation adjustment and non-controlling interest in net assets.

(6) Method of important hedge accounting

① Hedge accounting method: Hedging activities are principally accounted for under deferred hedge accounting.

Allocation is applied to exchange contracts that are eligible for allocation, and exceptional accounting is applied to interest rate swaps that are eligible for exceptional accounting. Moreover, integrated accounting is applied to interest rate currency swaps that are eligible for integrated accounting (allocation, exceptional accounting).

② Hedging instruments and hedged items:

The hedging instruments and items that are subject to hedge accounting in the consolidated fiscal year are as follows:

a Hedging instrument: Exchange contracts
Hedged items: Foreign currency receivables and forecast foreign currency transactions on exported products

b Hedging instrument: Interest Rate Currency Swaps, Interest Rate Swaps
Hedged items: Foreign currency denominated debt, Japanese currency denominated debt

③ Hedging policy: Based on the internal rules that determine the authority regulations and transaction limits for derivative transactions, hedging activities are undertaken within specified limits to hedge fluctuation risks of exchange rates and interest rates.

④ Assessment of hedge effectiveness: Effectiveness of hedging is assessed by checking if there is a high correlation between exchange rate fluctuations and cash flow fluctuations of the hedged items and the exchange rate fluctuations and cash flow fluctuations of the hedging instruments. However, exceptional accounting of interest rate swaps and integrated accounting (allocation, exceptional accounting) of interest rate currency swaps are omitted from the scope of effectiveness assessment.

(7) Amortization method for goodwill and the amortization period: Goodwill is amortized by using the straight-line method over a period of 17 years. However, if the amount of goodwill is immaterial, it is amortized all at once.

(8) Scope of funds in the consolidated statements of cash flow: Cash in consolidated statements of cash flow comprise cash on hand, demand deposits, and short-term investments that are readily convertible into cash, are exposed to insignificant risk of price fluctuations, and are redeemable in three months or less from each acquisition date.

(9) Other significant matters for preparation of consolidated financial statements and accounting for consumption tax and the like

The consumption tax borne by the Company and its domestic subsidiaries is accounted for by the tax-exclusion method.

(Changes in Accounting Policy)

(Application of Accounting Standards for Business Combinations, and the like)

If a subsidiary adopts the "Accounting Standard for Business Combinations" (Accounting Standards Board of Japan (ASBJ) Statement No. 21, September 13, 2013; hereinafter referred to as "Business Combination Accounting Standard"), the "Accounting Standard for Consolidated Financial Statements" (ASBJ Statement No. 22, September 13, 2013; hereinafter referred to as "Consolidated Financial Statements Accounting Standard"), and the "Accounting Standard for Business Divestitures" (ASBJ Statement No. 7, September 13, 2013; hereinafter referred to as "Business Divestitures Accounting Standard"), etc. from the current accounting year, and if the control over the subsidiary is maintained, differences due to changes in the Company's equity interests in the subsidiary shall be earmarked as capital surplus. In addition, the Company has made a change to earmark expenses related to acquisitions as costs for a consolidated fiscal year when the expenses were incurred. Furthermore, with regard to a business combination to be conducted after the beginning of the current consolidated fiscal year, the Company changed the method to present adjustments to allotment of acquisition cost after the confirmation of tentative accounting methods to reflect such adjustments in the consolidated financial statement for a consolidated fiscal year in which the business combination takes place. In addition, the method to present current net income and other financial data was changed, along with a change in presentation from minority shareholders' interests to non-controlling interests. To reflect such changes, the consolidated financial statement for the previous consolidated fiscal year were reclassified to conform with the presentation of the current year.

The application of the Accounting Standards of Business Combinations and its related standards is subject to the transitional measures stipulated in the provisions of Article 58-2 (4) of Accounting Standard for Business Combinations, Article 44-5 (4) of Accounting Standard for Consolidated Financial Statements, and Article 57-4 (4) of Accounting Standard for Business Divestiture, and been underway since the beginning of the first quarter of the current consolidated fiscal year and will continue to be going forward.

These changes had no effect on the consolidated financial statements.

(Application of Practical Solution on a Change in Depreciation Method due to 2016 Tax Reform)

In accordance with the revision of the Corporate Tax Act, the Company adopted the "Practical Solution on a Change in Depreciation Method Due to Tax Reform 2016" (Practical Issues Task Force (PITF) No. 32, June 17, 2016) in the current consolidated fiscal year, and has changed the depreciation method for facilities attached to buildings and structures acquired on or after April 1, 2016 from declining balance method to straight-line method.

The impact of this change on operating incomes, current profits, and current net loss before taxes is minimal.

(Notes related to Consolidated Statements of Income)

*1. Impairment loss

Impairment loss of the following asset groups is recorded in the consolidated statements of the Group. Previous Consolidated Fiscal Year (January 1, 2015 to December 31, 2015)

① Assets that have suffered impairment

Utility	Type	Company name	Place	Impairment loss (Millions of yen)
Idle asset	Land	Tokai Carbon Co., Ltd.	Gotenba-city, Shizuoka	39
Asset to be disposed of	Buildings and structures Machinery, equipment, and vehicles Furnace Other	Tokai Carbon Co., Ltd.	Ashikita-machi, Ashikita-gun, Kumamoto	50
Asset to be disposed of	Buildings and structures	Tokai Carbon Co., Ltd.	Taketoyo-cho, Chita-gun, Aichi	1
Asset to be disposed of	Buildings and structures	Tokai Carbon Co., Ltd.	Omihachiman-shi, Shiga	17
Asset to be disposed of	Buildings and structures	Tokai Carbon Co., Ltd.	Hofu-city, Yamaguchi	30
Asset to be disposed of	Buildings and structures Machinery, equipment, and vehicles		Nagoya-city, Aichi	226
Heating elements and	Machinery,	.	Shibata-machi,	0

other manufacturing facilities	equipment, and vehicles		Shibata-gun, Miyagi	
Carbon black manufacturing facilities	Machinery, equipment, and vehicles Construction in progress	Tokai Carbon Tianjin	Tianjin, People's Republic of China	3,958
Idle asset	Machinery, equipment, and vehicles	Tokai Carbon Co., Ltd.	Ishinomaki-shi, Miyagi	1

② Information concerning impairment loss

The Company has recorded an impairment loss with respect to the land in Gotemba city of Shizuoka prefecture because the recoverable amount fell short of the book value, since the asset was idle and no future use could be expected.

In the carbon black and fine carbon segments, the company recorded an impairment loss with respect to the asset in Ashikita machi of Ashikita district in Kumamoto prefecture, which was scheduled for retirement, and for which retirement was determined due to reorganization of plants in connection with the strategy to promote production optimization, since the recoverable amount fell short of the book value.

The Company recorded impairment loss with respect to the assets in Taketoyo of Chita district in Aichi prefecture, Omihachiman city of Shiga prefecture, and Hofu city of Yamaguchi prefecture, which were scheduled for retirement, and for which retirement was determined due to no probable use, since the recoverable amount fell short of the book value.

The Company has recorded an impairment loss with respect to the asset in Nagoya city of Aichi prefecture, which was scheduled for retirement, and for which retirement was determined as a result of the decision to sell the factory site, since the recoverable amount fell short of the book value.

The Company has recorded an impairment loss with respect to the heating elements and other manufacturing facilities at Shibata town of Shibata district in Miyagi prefecture because their recoverable amount fell short of the book value due to a decline in profitability.

The Company has recorded an impairment loss with respect to the Carbon Black manufacturing facility in the Tiajin city of People's Republic of China because its recoverable amount fell short of the book value due to a decline in profitability.

The Company has recorded an impairment loss with respect to the machinery and equipment in the Ishinomaki city of Miyagi prefecture because the recoverable amount fell short of the book value, since the asset was idle and no future use could be expected.

③ Breakdown of the amount and types of impairment loss

	(Millions of yen)
Buildings and structures	302
Machinery, equipment, and	3,881
Furnace	9
Land	39
Construction in progress	91
Other	3

④ Outline of asset groups that have suffered impairment loss and method of grouping

・Asset group

Tokai Carbon Co., Ltd. - Idle asset
Tokai Carbon Co., Ltd. - Asset scheduled for retirement
TOKAI KONETSU KOGYO CO., LTD. - Asset scheduled for retirement
TOKAI KONETSU KOGYO CO., LTD. - Heating elements and other manufacturing facilities
Tokai Carbon (Tianjin) Co., Ltd. - Carbon black manufacturing facility

・Method of grouping

The sections under management accounting are considered as grouping units. However, assets under leased assets, idle assets, or assets scheduled for retirement are grouped according to each individual asset.

⑤ Method of calculating recoverable amount

The recoverable amount of the idle asset in Gotemba city of Shizuoka prefecture was estimated based on the net selling price, and evaluated based on the amount calculated on the basis of the fixed asset tax valuation amount.

The asset scheduled for retirement in the Ashikita machi of Ashikita district in Kumamoto prefecture was assessed based on the value-in-use.

The assets scheduled for retirement in Taketoyo of Chita district in Aichi prefecture, Omihachiman city of Shiga prefecture, Hofu city of Yamaguchi prefecture, and Nagoya city of Aichi prefecture were assessed based on the residual values.

The recoverable amount of the heating elements and other manufacturing facilities in Shibata town of Shibata district in Miyagi prefecture were calculated based on the value-in-use. The recoverable amount was assessed to be zero because the value-in-use based on the future cash flow was negative.

The recoverable amount of the carbon black manufacturing facility in the Tiajin city of People's Republic of China was calculated by estimating the value-in-use, and applying a discount rate of 6.0% to the future cash flow.

The idle asset in the Ishinomaki city of Miyagi prefecture was evaluated based on the residual value.

Consolidated fiscal year (From January 1, 2016 to December 31, 2016)

① Assets that have suffered impairment

Utility	Type	Company name	Place	Impairment loss (Millions of yen)
Carbon black manufacturing facility	Buildings and structures Machinery, equipment, and vehicles Construction in progress			1,858
Fine carbon manufacturing facility	Buildings and structures Machinery, equipment, and vehicles Furnace Land Construction in progress Other Software	Tokai Carbon Co., Ltd.	Ashikita-machi, Ashikita-gun, Kumamoto	3,117
Graphite electrode manufacturing facility	Buildings and structures Machinery, equipment, and vehicles Furnace Land Other Software	Tokai Carbon Co., Ltd.	Omihachiman-city, Shiga	1,604
Graphite electrode manufacturing facility	Buildings and structures Machinery, equipment, and vehicles Furnace Land Other Software	Tokai Carbon Co., Ltd.	Hofu-shi, Yamaguchi	2,293
Idle asset	Machinery, equipment, and vehicles Construction in progress			307
Idle asset	Buildings and structures Machinery, equipment, and vehicles Furnace Construction in progress Other	Tokai Carbon Co., Ltd.	Ashikita-machi, XXX-gun, Kumamoto	1,111
Idle asset	Machinery, equipment, and vehicles	Tokai Carbon Co., Ltd.	Ishinomaki-shi, Miyagki	20
Idle asset	Buildings and structures Machinery, equipment, and vehicles Furnace Other	Tokai Carbon Co., Ltd.	Hofu-shi, Yamaguchi	13
Asset to be sold	Buildings and structures Machinery,	Tokai Carbon Co., Ltd.	Taketoyo-machi, Chita-gun, Aichi	380

	equipment, and vehicles Land Other Software			

② Information concerning impairment loss

The Company recorded an impairment loss with respect to the carbon black manufacturing facility in the Tiajin city of People's Republic of China, the fine carbon manufacturing facility in Ashikita machi of Ashikita district in Kumamoto prefecture, and the graphite electrode manufacturing facilities in Omihachiman city of Shiga prefecture and Hofu city of Yamaguchi prefecture because the recoverable amount of these assets fell short of the book value due to a decline in profitability.

The Company recorded an impairment loss with respect to the idle asset in the Tiajin city of People's Republic of China because the recoverable amount fell short of the book value, since the asset was idle and no future use could be expected as a result of the decision to close one line of the production facility.

The Company has recorded an impairment loss with respect to the idle asset in Ashikita machi of Ashikita district in Kumamoto prefecture because the recoverable amount of the asset fell short of the book value, since the asset was idle and no future use could be expected as a result of the decision to dispose of, suspend, etc. outdated facilities based on a management rationalization measure.

The Company has recorded an impairment loss with respect to the idle asset in the Ishinomaki city of Miyagi prefecture because the recoverable amount of the asset fell short of the book value, since the asset was idle and no future use could be expected as a result of the decision to close one line of the production facility.

The Company has recorded an impairment loss with respect to the idle asset in Hofu city of Yamaguchi prefecture because the recoverable amount of the asset fell short of the book value, since the asset was idle and no future use could be expected as a result of the decision to dispose of outdated facilities.

The Company has recorded an impairment loss with regards to the asset in Taketoyo of Chita district in Aichi prefecture, which was scheduled to be sold, because the recoverable amount of the asset fell short of the book value as a result of the decision to sell.

③ Breakdown of the amount and types of impairment loss

	(Millions of yen)
Buildings and structures	4,603
Machinery, equipment, and	3,124
Furnace	290
Land	961
Construction in progress	1,628
Other	71
Software	27

④ Outline of asset groups that have suffered impairment loss and method of grouping

・Asset group

Tokai Carbon (Tianjin) Co., Ltd. - Carbon black manufacturing facility

Tokai Carbon Co., Ltd. - Fine carbon manufacturing facility

Tokai Carbon Co., Ltd. - Graphite electrode manufacturing facility

Tokai Carbon (Tianjin) Co., Ltd. - Idle asset

Tokai Carbon Co., Ltd. - Idle asset

Tokai Carbon Co., Ltd. - Asset scheduled to be sold

・Method of grouping

The sections under management accounting are considered as grouping units. However, assets under leased assets, idle assets, and assets scheduled for retirement, or assets scheduled to be sold are grouped according to each individual asset.

⑤ Method of calculating recoverable amount

The recoverable amount of the carbon black manufacturing facility in the Tiajin city of People's Republic of China was calculated by estimating the value-in-use, and applying a discount rate of 6.0% to the future cash flow. The recoverable amount of the Fine Carbon manufacturing facility in Ashikita machi of Ashikita district in Kumamoto prefecture was calculated by estimating the value-in-use, and applying a discount rate of 6.95% to the future cash flow. The recoverable amounts of the graphite electrode manufacturing facilities in Omihachiman city of Shiga prefecture and Hofu city of Yamaguchi prefecture were calculated by estimating the value-in-use, and applying a discount rate of 8.63% to the future cash flow. The idle assets in the Tiajin city of People's Republic of China, Ashikita machi of Ashikita district in Kumamoto prefecture, Ishinomaki city of Miyagi prefecture, and Hofu city of Yamaguchi prefecture were evaluated based on the residual value. The recoverable amount of the asset scheduled to be sold in Taketoyo of Chita district in Aichi prefecture was estimated based on the net selling price, and assessed based on the amount of the sales contract.

*2 Special severance payments

Current Consolidated Fiscal Year (January 1, 2016 to December 31, 2016)

Special severance payments are severance pays paid to retired employees following the workforce optimization program undertaken as a part of management rationalization measures, or closing of one line of production facility and reduction in workforce as a part of the management system strengthening measures undertaken at Tokai Carbon (Tianjin) Co., Ltd.

(Segment information, etc.)

(Segment information)

1. Overview of reportable segments

In the reportable segments of the Company, separate financial information is available on the Company's constituent units, and the Board of Directors need to periodically review the same in order to evaluate the allocation of management resources and performance.

The Company headquarters have a business division for each product and each business division develops comprehensive strategies in Japan and overseas for the products it handles and develops business activities.

Thus, the Company consists of segments based on the business division and each segment corresponds to a product. The four reportable segments are "carbon black", "graphite electrode", "fine carbon" and "industrial furnace and related products".

Followed by the development of the three-year medium-term management plan "T-2018" with FY2016 as the first year and associated changes in the management policy, effective from the current consolidated fiscal year, the Company reviewed the classification of its business segments and divided the existing reportable segment of "carbon and ceramics" into the new "graphite electrodes" segment and "fine carbon" segment.

Segment information of the previous consolidated year has been reclassified based on the new reportable segment classification.

The main products from each reportable segment are as follows:

Reportable Segment	Main Product
Carbon Black	Carbon black (for rubber products, black pigments, and conduction)
Graphite Electrodes	Graphite electrodes used in electric arc steel furnaces
Fine Carbon	Fine carbon (special carbon products), electrode brushes, impervious graphite, and pencil lead
Industrial Furnaces and Related Products	Industrial electric furnaces, gas furnaces, silicon carbide and alumina refractories, fireproof insulation bricks, and ceramic resistors

2. Method of calculating net sales, profit or loss, assets and other items for each reportable segment

The method of accounting the reportable business segments is the same as stated in "Significant Matters for Preparation of Consolidated Financial Statements". The profit figures in the reportable segments are based on the operating income. Inter-segment sales or transfers are based on market prices.

(Changes in the method of measuring profit or loss of reportable segments)

Effective from the current consolidated fiscal year, the Company has changed the method of allocating expenses for some of the administrative costs to more appropriately evaluate the performance of each segment.

Segment information of the previous consolidated year has been reclassified using the changed method.

3. Information related to net sales, profit, assets, and other items of each reportable Segment for the previous consolidated fiscal year (From January 1, 2015 to December 31, 2015) (Millions of yen)

	Reportable segment					Other operations (note) 1	Total	Adjustments (Note) 2	Amount on consolidated financial statement (Note) 3
	Carbon Black	Graphite Electrodes	Fine Carbon	Industrial Furnaces and Related Products	Total				
Net sales									
External sales	46,224	26,960	14,973	5,212	93,369	11,495	104,864	-	104,864
Inter-segment sales/transfers	66	o	88	257	412	-	412	(412)	
Total	46,291	26,960	15,061	5,469	93,781	11,495	105,277	(412)	104,864
Segment income	1,171	2,539	112	676	4,500	681	5,181	(1,092)	4,088
Segment assets	67,070	37,480	31,933	6,964	143,508	11,581	155,090	28,984	184,074
Other Business									
Depreciation	4,540	2,028	1,448	183	8,201	743	8,944	297	9,242
Impairment loss	3,961	48	50	226	4,287	-	4,287	39	4,326
Amount invested in the companies accounted for by equity–method	-	105	4,846	-	4,952	-	4,952	-	4,952
Increase in tangible fixed assets and intangible fixed assets	2,394	803	1,283	139	4,621	437	5,058	242	5,301

(Note) 1 The business segment "Other Business" is not included in the reportable segments. It includes businesses such as friction materials business and property leasing.

2. The adjusted amounts are as follows:

(1) The adjusted amount of segment profit is (1,092) Millions of yen, including (1,113) Millions of yen of the corporate expenses, which are not allocated to each reportable segment. The corporate expenses consist of expenses such as the research and development expenses that are not attributable to any reportable segment.

(2) The adjusted amount of segment assets is 28,984 Millions of yen, including 29,106 Millions of yen of the corporate expenses, which are not allocated to each reportable segment. The main group assets are surplus operating funds (other than cash and deposit), investment securities, etc.

(3) The amount of adjustment of impairment loss is JPY 39 million, which is the impairment loss of company-wide assets, which are not allocated to each reportable segment.

(4) The amount of adjustment of increase in tangible and intangible fixed assets is 242 millions of yen, which is the capital investment in group assets, which are not allocated to each reportable segment.

3. Segment income corresponds to operating income in the consolidated statements of operations.

Segment for the consolidated fiscal year under review (From January 1, 2016 to December 31, 2016)

	Reportable segment					Other operations (note) 1	Total	Adjustments (Note) 2	Amount on consolidated financial statement (Note) 3
	Carbon Black	Graphite Electrodes	Fine Carbon	Industrial Furnaces and Related Products	Total				
Net sales									
External sales	37,764	20,714	12,925	5,243	76,648	11,932	88,580	-	88,580
Inter-segment sales/transfers	64	4	86	264	420	-	420	(420)	
Total	37,829	20,718	13,012	5,508	77,068	11,932	89,000	(420)	88,580
Segment income	4,755	(1,290)	(1,825)	516	2,156	522	2,678	(1,546)	1,131
Segment assets	56,859	25,485	23,557	6,152	112,055	11,342	123,397	35,426	158,824
Other Business									
Depreciation	3,449	1,838	1,474	176	6,939	731	7,671	452	8,124
Impairment loss	2,186	4,014	4,228	-	10,429	-	10,429	277	10,707
Amount invested in the companies accounted for by equity–method	-	69	5,187	-	5,257	-	5,257	-	5,257
Increase in tangible fixed assets and intangible fixed assets	1,951	1,122	1,048	376	5,392	892	5,392	620	6,013

Notes 1 “Other businesses” are a business segment not included in the reportable segments. It includes businesses involving the friction material segment and property leasing.

2 The amount of adjustment are as follows.

(1) The adjusted amount of profit or loss is (1,546) millions of yen, including (1,534) millions of yen of the corporate expenses, which are not allocated to each reportable segment. The corporate expenses consist of research and development expenses which are not attributable to any reportable segment.

(2) The adjusted amount of segment assets is 35,426 millions of yen, including 35,322 millions of yen of the corporate expenses, which are not allocated to each reportable segment. The main group assets are surplus operating funds (other than cash and deposit), investment securities, etc.

(3) The amount of adjustment of impairment loss is 277 millions of yen, which is the impairment loss of group assets, which are not allocated to each reportable segment.

(4) The amount of adjustment of increase in tangible and intangible fixed assets is 620 millions of yen, which is the capital investment in group assets, which are not allocated to each reportable segment.

3 Segment income/(loss) corresponds to operating income in the consolidated statements of operations

(Related information)

The previous fiscal year (From January 1, 2015 to December 31, 2015)

1. Information by products and services

Omitted because similar information is mentioned in the segment information.

2. Information by region (1) Net sales

(Millions of yen)

Japan	Asia	Europe	Other area	Total
47,526	29,330	13,643	14,363	104,864

(Note) The net sales are based on the customer’s location, and categorized by country or region.

(2) Tangible fixed assets

(Millions of yen)

Japan	Asia	Europe	Other area	Total
35,219	5,325	11,062	3,933	56,629

3. Information related to important clients Information

Omitted because no client constitutes 10% or more of the net sales stated in consolidated income statement among the external sales.

The fiscal year under review (From January 1, 2016 to December 31, 2016)

1. Information by products and services

Omitted because similar information is mentioned in the segment information.

２． Information by country or region

(1) Net sales

(Millions of yen)

Japan	Asia	Europe	Other area	Total
43,372	24,230	11,029	9,948	88,580

(Note) The net sales are based on the customer’s location, and categorized by country or region.

(2) Tangible fixed assets

Japan	Canada	Asia	Europe	Other area	Total
25,273	6,319	7,135	3,477	916	43,122

3. Information related to important clients Information

Omitted because no client constitutes 10% or more of the net sales stated in consolidated income statement among the external sales.

(Details on impairment of fixed assets for each reportable segment)

Previous Consolidated Fiscal Year (January 1, 2015 to December 31, 2015)

Omitted because similar information is mentioned in the segment information.

Current consolidated fiscal year (January 1, 2016 to December 31, 2016)

Omitted because similar information is mentioned in segment information.

(Information concerning goodwill amortization and unamortized balance by reportable segment)

Previous fiscal year (From January 1, 2015 to December 31, 2015)

(Millions of yen)

	Reportable Segment					Elimination/Corporate	Total
	Carbon Black	Graphite Electrodes	Fine Carbon	Industrial Furnaces and Related Products	Total		
Amortization in current period	426	-	-	-	426	-	426
Balance at the end of current period	6,135	-	-	-	6,135	-	6,135

The fiscal year under review (From January 1, 2016 to December 31, 2016) (Millions of yen)

	Reportable Segment					Elimination/Corporate	Total
	Carbon Black	Graphite Electrodes	Fine Carbon	Industrial Furnaces and Related Products	Total		
Amortization in current period	372	-	-	-	372	-	372
Balance at the end of current period	5,604	-	-	-	5,604		5,604

(Information concerning profit on negative goodwill by reportable segment)

The previous fiscal year (From January 1, 2015 to December 31, 2015)

None

This previous fiscal year (From January 1, 2016 to December 31, 2016)

None

(Information per share)

	The previous fiscal year (From January 1, 2015 to December 31, 2015)	The fiscal year under review (From January 1, 2016 to December 31, 2016)
Net assets per share	576.57	520.69
Net income per share or Net loss per share (△)	11.65	(37.20)

(Note) 1 The diluted net income per share for previous consolidated fiscal year is not mentioned because there are no diluted shares. The diluted net income per share for current consolidated fiscal year is not indicated because net loss per share is indicated and there are no diluted shares.

2 The basis of calculating current net income or loss per share is as follows:

	The previous fiscal year (From January 1, 2015 to December 31, 2015)	The fiscal year under review (From January 1, 2016 to December 31, 2016)
Net income or loss attributable to owners of the parent company (millions of yen) Amount non-attributable to common shareholders (millions of yen)	2,484	(7,929)
Amount non-attributable to common shareholders (millions of yen)		
Net income or loss attributable to ordinary equity holders of the owners of the parent company (millions of yen)	2,484	(7,929)
Average number of common shares during the term (1000 shares)	213,210	213,176

(Significant subsequent events)

None

(Omission of disclosure)

Annotations related to consolidated balance sheet, consolidated statement of comprehensive income, consolidated statements of changes in net assets, consolidated cash flow statements, lease transactions, financial goods, marketable securities, derivatives trading, retirement benefits, tax effect accounting, asset retirement obligation, property leasing, information concerning related parties are omitted because the necessity of disclosing their information in this financial report is not considered significant.

6. Other

(1) Changes in Management

1) Appointment of Representative Director

Not applicable

2) Other Changes in Management

(a) New member of the Board

New Position	Name	Current Position
Member of the Board Executive Officer General Manager, Fine Carbon Division	Masafumi Tsuji	Executive Officer General Manager, Fine Carbon Division

The above position is scheduled under the approval of the 155th Ordinary General Meeting of Shareholders on March 29, 2017.

(b) Retirement from member of the Board

Current Position	Name	Post-Retirement
Member of the Board Managing Executive Officer General Manager, R&D Strategy Division	Toshiaki Fukuda	Managing Executive Officer General Manager, R&D Strategy Division

The above retirement is scheduled when the 155th Ordinary General Meeting of Shareholders closes on March 29, 2017.

(c) Other Changes

New Position	Name	Current Position
Member of the Board Senior Managing Executive Officer Responsible for Corporate Planning Department	Nobuyuki Murofushi	Member of the Board Senior Managing Executive Officer General Manager, Carbon Black Division
Member of the Board Managing Executive Officer Responsible for Accounting & Finance Department and Information System Department	Masanao Hosoya	Member of the Board Managing Executive Officer General Manager, Corporate Administration Division
Member of the Board Executive Officer Responsible for Human Resources, General Affairs, and Legal Affairs Department	Yuji Serizawa	Member of the Board Executive Officer General Manager, Corporate Planning Division

The above position is scheduled on March 29, 2017.

(d) Retirement from Senior Corporate Advisor

Current Position	Name	Post-Retirement
Senior Corporate Advisor	Yoshinari Kudo	—

The above retirement is scheduled on March 29. 2017.

End