

ANNUAL REPORT 2016

For the Year Ended December 31, 2016



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Basic Corporate Philosophy

The Group operates under the corporate philosophy, "Ties of Reliability," and the basic policies governing its activities comprise the principles of ability to create value, fairness, ecology, and internationalism. The Group's aim is to be the "Global Leader of Carbon Materials" within and outside of Japan by supplying high-quality products with a focus on carbon materials.

Through these corporate activities, the Group has been

working to expand its operating base, optimize the utilization of management resources, bolster cost competitiveness, and strengthen technology development capabilities. By achieving sustained earnings growth, the Group seeks to fulfill the expectations of its shareholders, customers, and employees as well as those of local communities and all other stakeholders. The Group contributes to the development of society, acting as a responsible corporate citizen.

Profile

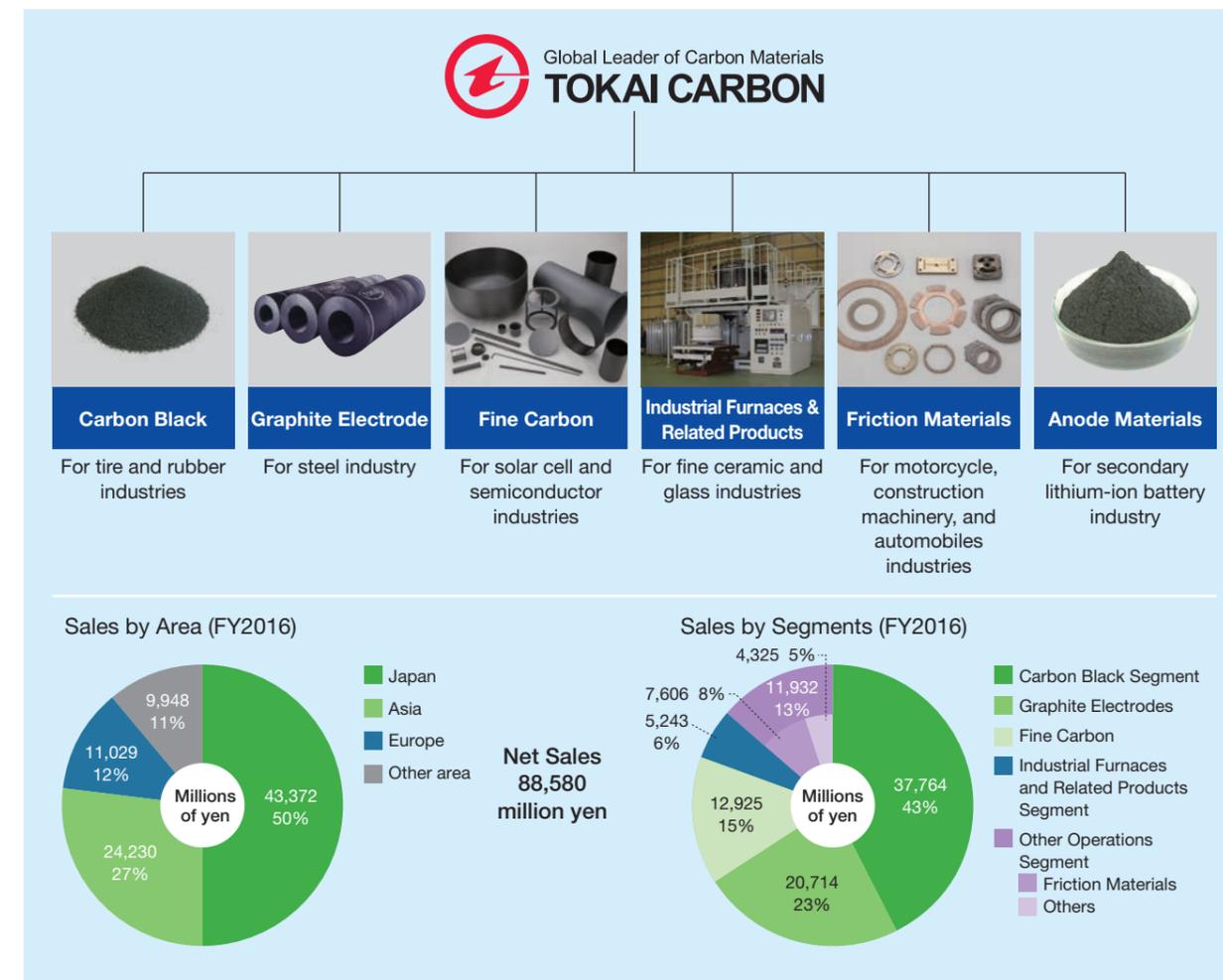
The Tokai Carbon Group commenced operations as a pioneer in the carbon industry in Japan in 1918.

It has been our pleasure and honor that we were able to actively contribute to the development of society through carbon-related products and services based on diverse manufacturing fields and technology.

The "Carbon Black" as a reinforcing material for rubber tires, the "Graphite Electrode" as an indispensable material to melt scrap to reproduce steel in electric arc furnace, the

"Fine Carbon" used in variety of field for high technology such as solar cell and semiconductors, the "Industrial furnace & related products" which is active in heat treatment process for ceramics, electrical parts, metal and glass, the "Friction material" for use in brakes and clutches on engineering vehicles, motorcycles and the "Anode material" for secondary lithium-ion batteries.

Growing together with these six core divisions, Tokai carbon continues to spread its wings globally.





Hajime Nagasaka
President and CEO

Message from President

Successful structural reform and fly-shift for growth

Analysis of business performance

Though the world economy saw economic slow-downs 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).

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

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

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’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 mindset change,” 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.

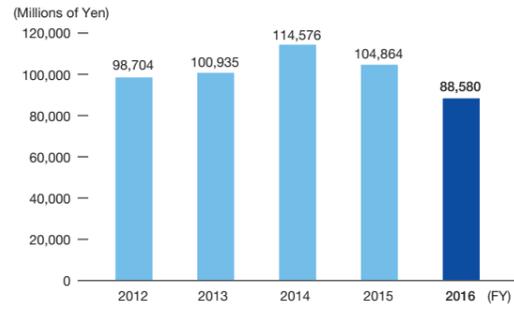
As we turn our gaze towards the issues of business administration, we understand that a compliance-focused management is the basic requirement. Thus, to fulfill this requirement while coping with the business environment of great uncertainty, the risk-management system needs to be upgraded and expanded 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.

Management Goals and Objectives

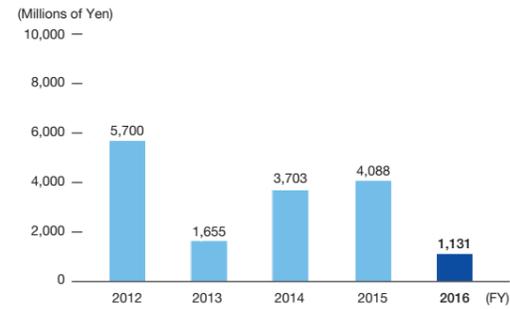
The Group considers net sales, ROS (operating income/net sales), and ROA (ordinary income/total assets) to be important performance indicators. Under “T-2018,” a three-year medium-term management plan starting from 2016, the Group will work toward increasing capital efficiency by regarding ROIC (return on invested capital) as the most important performance indicator. ROIC is estimated by dividing after-tax operating income by invested capital (working capital + fixed assets).

Financial/Non-Financial Highlights

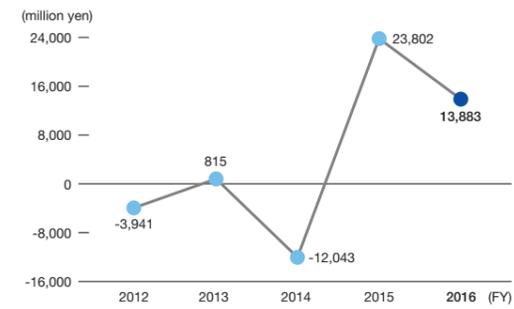
Net sales



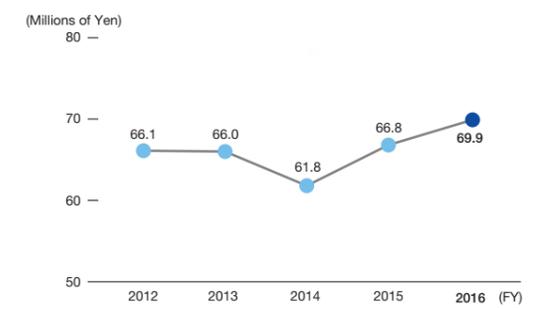
Operating income



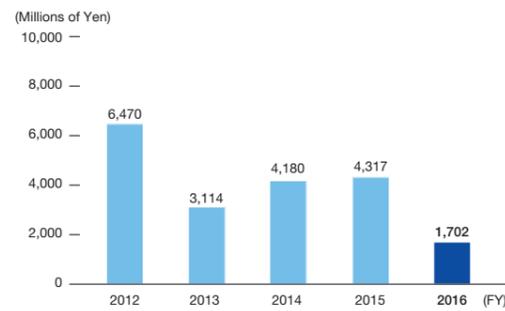
Free cash flow



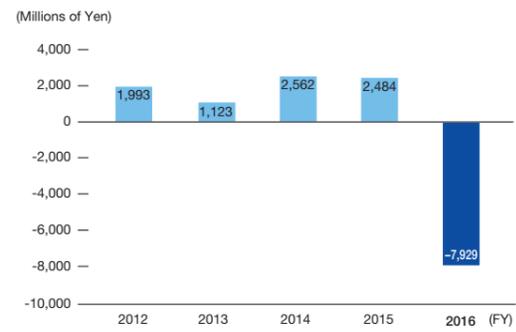
Capital adequacy ratio



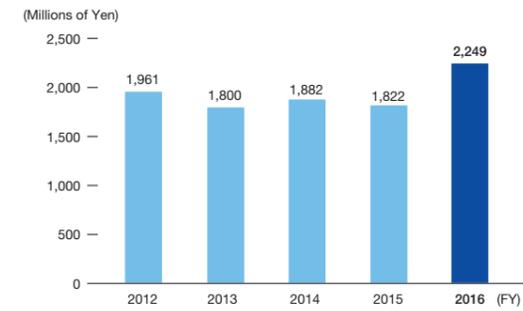
Ordinary income



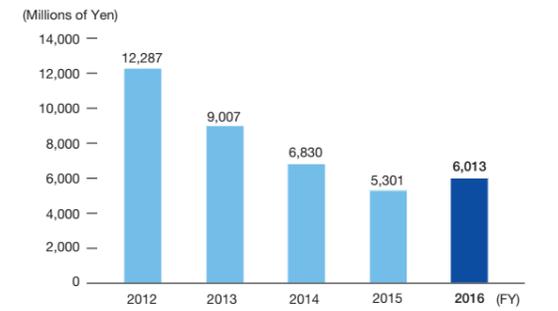
Profit/(loss) attributable to owners of the parent company



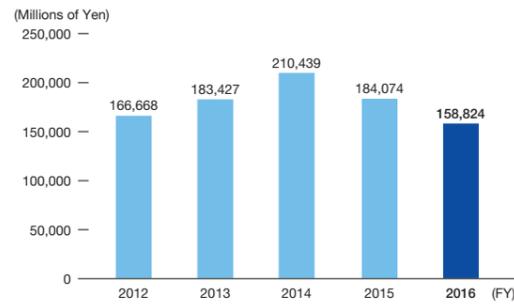
Research and development expenses



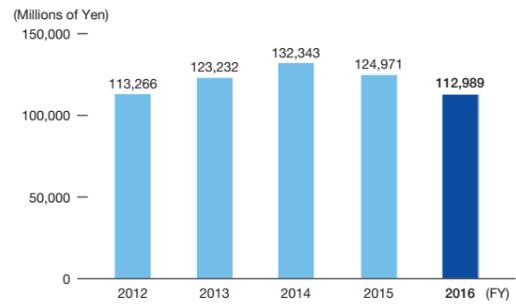
Amount Capex investment



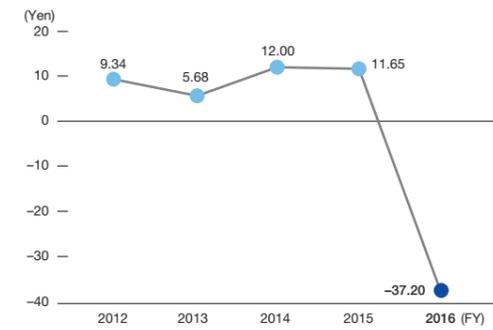
Total assets



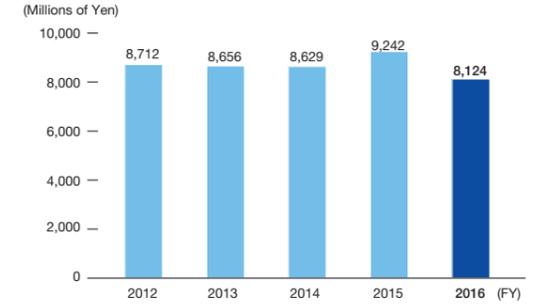
Net assets



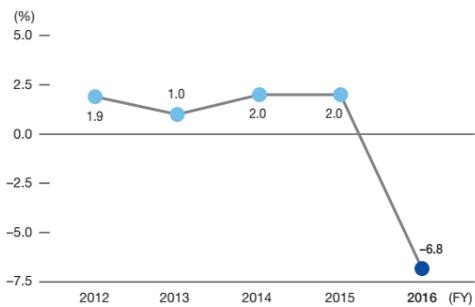
Profit per share



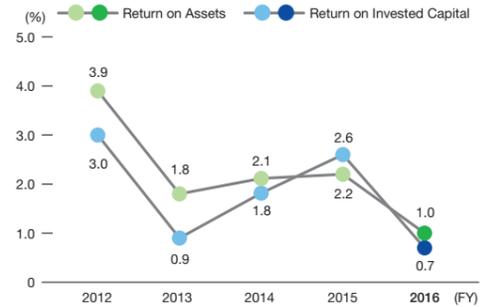
Depreciation and amortization



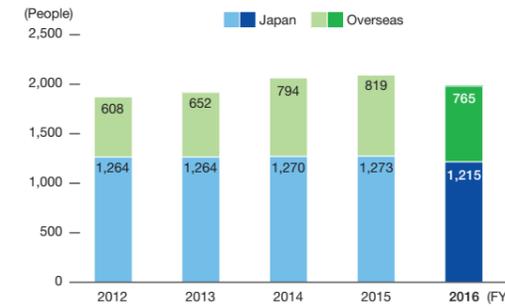
ROE



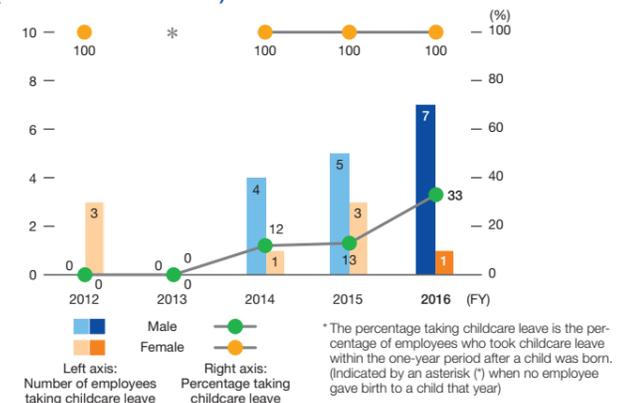
ROA/ROIC



Number of employees (Consolidated)



Number of Employees Taking Childcare Leave (Non-consolidated)



Five-year Summary

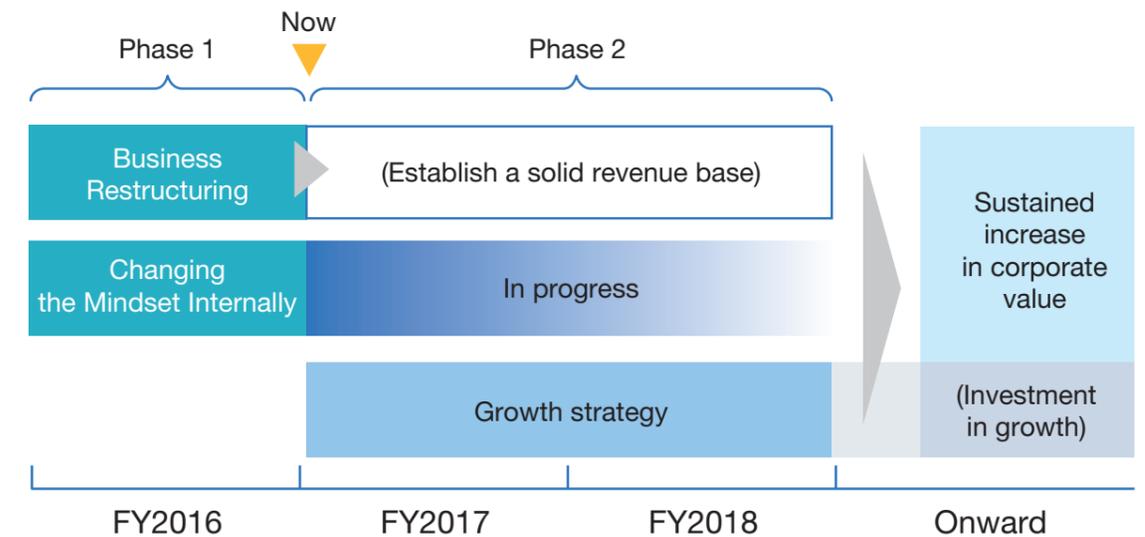
	2012	2013	2014	2015	2016	2016
For the Year						
						Thousands of U.S. Dollars
Net Sales	98,704	100,935	114,576	104,864	88,580	813,780
Carbon Black	40,968	44,910	54,836	46,224	37,764	346,936
Graphite Electrodes	30,847	29,465	30,088	26,960	20,714	190,299
Fine Carbon	13,769	12,558	14,399	14,973	12,925	118,741
Industrial Furnaces and Related Products	4,239	4,213	4,671	5,212	5,243	48,167
Other Operations	8,879	9,788	10,580	11,495	11,932	109,619
Gross Profit	18,560	15,267	18,651	19,960	16,529	151,851
Operating Income	5,700	1,655	3,703	4,088	1,131	10,390
Income Before Income Taxes and Minority Interests	3,992	2,926	4,345	6,726	-7,938	-72,926
Net Income	1,993	1,213	2,562	2,484	-7,929	-72,843
Depreciation and Amortization	8,712	8,656	8,629	9,242	8,124	74,635
Research and Development Costs	1,961	1,800	1,882	1,822	2,249	20,661
Capital Expenditures	12,287	9,007	6,830	5,301	6,013	55,241
At Year-End						
						Thousands of U.S. Dollars
Total Assets	166,668	183,427	210,439	184,074	158,824	1,363,764
Total Net Assets	113,266	123,232	132,343	124,971	112,989	969,946
Per Share Data (yen)						
						U.S. Dollars
Net Income	9.34	5.68	12.00	11.65	-37.20	-0.34
Total Net Assets	515.90	567.19	609.60	576.57	520.69	4.78
Cash Dividends Applicable to The Year	7.00	6.00	6.00	6.00	6.00	0.06
Financial Ratios (%)						
Return on Assets	3.9	1.8	2.1	2.2	1.0	1.0
Return on Equity	1.9	1.0	2.0	2.0	-6.8	-6.8
Equity Ratio	66.1	66.0	61.8	66.8	69.9	69.9

Note: U.S. dollar amounts in this page are translated from Japanese yen, for convenience only.
 ¥108.85=US\$1, the exchange rate of average in 2016 to [For the Year] and [Per Share Data]
 ¥116.49=US\$1, the exchange rate at December 31, 2016 to [At Year-End]

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.

Overview of T-2018 Positioning of the three-year management plan



Phase 2: Growth Strategy

Measures suitable for the external environment and potential market for each business segment

(1) Improve profitability	(2) Expand business domains	(3) M&A
<p>Reduce costs further through greater streamlining and improvements in efficiency amid the current structural slump</p> <ul style="list-style-type: none"> Graphite Electrodes Business: Reduce manufacturing costs and SG&A expenses more Fine Carbon Business: Complete execution of structural reform plan 	<ul style="list-style-type: none"> Carbon Black Business: Expand market sales of high value-added products Tokai Konetsu Kogyo Co., Ltd.: Expand sales of industrial furnaces, Expand sales of heating elements Friction Materials Business: Expand sales New business growth: LiB anode material, aqueous carbon black, next generation 	<ul style="list-style-type: none"> Existing business domains Expand business segments to include electronic components and automotive-related products

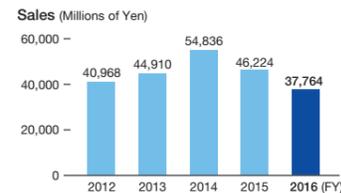
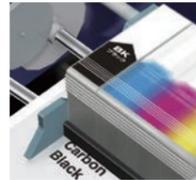
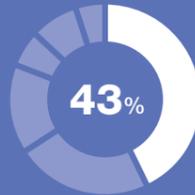
Review of Operations

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.

Carbon Black

Many of the black products we see around us contain carbon black. It is mainly used as a reinforcing agent for auto tires and other industrial rubber products, and is also used as a coloring agent.

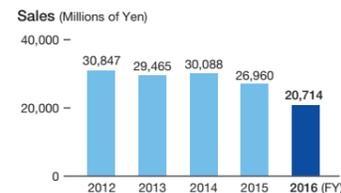


The selling price of carbon black fell due to decline in the price of crude oil, thus causing a fall in revenue from the corresponding period of the previous fiscal year. Though there were indications that the crude oil price will increase in the current period, it did not return to the standard price of the previous period. Meanwhile, the sales figures have shown a steady performance, and due to 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.

Graphite Electrodes

Graphite electrodes are used in electric furnaces to melt scrap (ferrous scrap) and produce steel. They melt scrap to a liquid state at high temperatures of 1,000°C or more.



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).

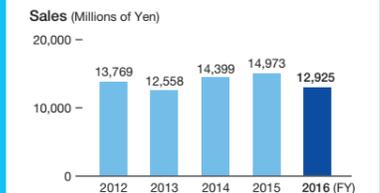
Fine Carbon

Fine carbon is used in the manufacturing processes for solar cells and semiconductors. It is also used when creating molds for automotive parts. It can be processed into different shapes to serve the purpose.



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).



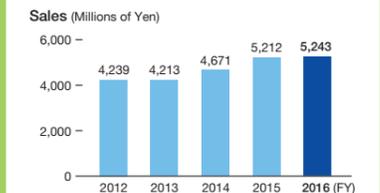
Industrial Furnaces & Related Products

Industrial furnaces and related products are used in heat treating ceramic, electronic components, metal, glass, and other materials. Tokai Konetsu Kogyo Co., Ltd., a wholly owned subsidiary of Tokai Carbon, manufactures and sells these 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 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 less 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

Friction materials are components of brakes and clutches on a variety of transportation vehicles, including industrial machinery, construction machinery, motorcycles, trucks, buses, and railways.



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.

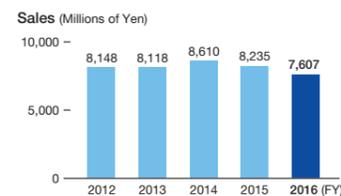
As a result, the net sales of friction materials division decreased 7.6% from the corresponding period of the previous fiscal year to JPY 7,606 million.

Anode materials

Anode materials are carbon materials which control the performance of secondary lithium-ion batteries for consumer use and installation in vehicles.

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 other operations 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.



Tokai Carbon Group has its research laboratory in several locations. Fuji Laboratory, Chita Laboratory, Hofu Laboratory, Tanoura Laboratory and Chigasaki Laboratory actively develop

new product and technology in cooperation with the R&D Division of the Company.

Description of main research and development

Fine carbon and fine ceramics, which the Company regards as growing fields, have superior characteristics as materials and are used in a broad range of applications. In the last few years, applications of fine carbon and fine ceramics in energy, semiconductor, electronics and environment sectors have been growing significantly, and we are developing products that meet the high-tech needs in such sectors.

Based on fostered technologies, the Company is pursuing investments in the research and development of carbon negative electrodes for lithium-ion batteries and aqua carbon black for inkjet printer pigment.

Tokai Konetsu Kogyo Co., Ltd. has been working on a task to enhance its technological standard so as to build a platform for growth. This will be the indispensable step to be successful at their growth strategy aimed in the "T-2018" the three year medium-term management plan started FY2016. The company is developing differentiated products in furnaces and silicon carbide heating elements. Those items will be commercialized in the secondary batteries and electric parts segments. On top of that, the company strengthens the good connection for development and manufacturing for much quick marketing activity to shorten the cycle of bringing new products to the market.

Amount of R&D expenses

R&D expenses for the fiscal year under review totaled ¥2,249 million.

Capital Investment

The Tokai Carbon Group focuses on product fields that are expected to grow over the long term and makes investments to rationalize the operation process and enhance the reliability of our product. During the current fiscal year, capital investments of ¥6,013 million in total were made.

In the carbon black business, capital investment of ¥1,951 million was made, mainly for maintenance and upgrades at the Chita Plant.

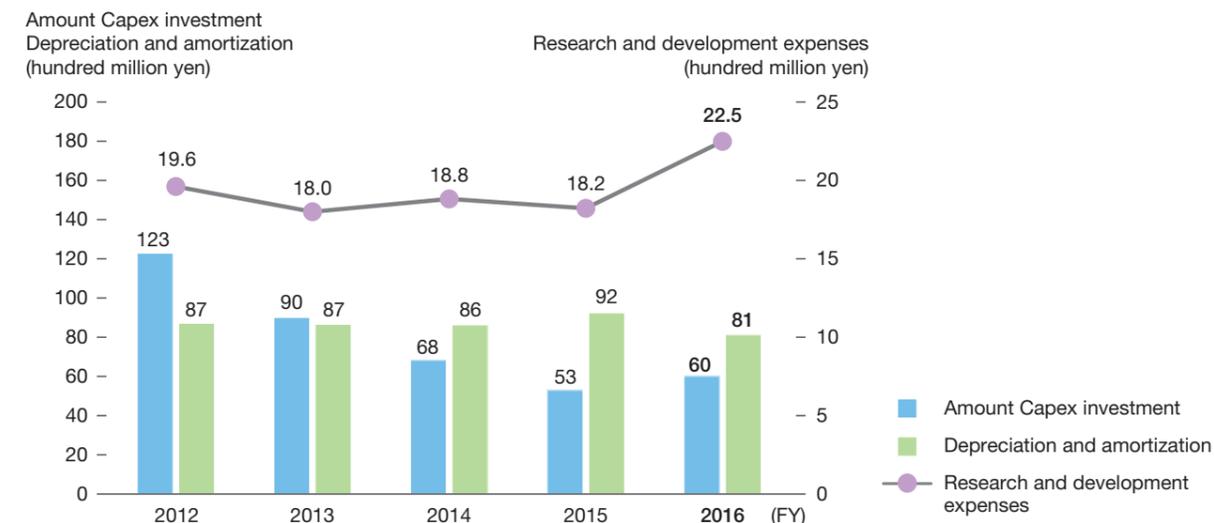
In the graphite electrodes business, capital investment

of ¥1,122 million was made.

In the fine carbon business, capital investment of ¥1,048 million was made, mostly at Tokai Fine Carbon Co., Ltd.

In the industrial furnaces and related products business, capital investment of ¥376 million was made.

In other business, capital investment of ¥892 million was made, mainly at Production Technology Center for new facility.



Analysis of Financial Position

I. 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 less 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 assets

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%

II. 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.

Year ended December 31,	Millions of yen	
	2015	2016
Cash flows from operating activities	¥20,613	¥17,505
Cash flows from investing activities	3,189	(3,622)
Cash flows from financial activities	(14,926)	(7,613)
Cash and cash equivalents at end of period	¥22,919	¥28,521

Forecast for the Year Ending December 31, 2017

Recovery of overall performance will result from several factors, including evaluation loss, allowance for doubtful receivables, R&D expenses recorded in the previous period,

and the cost reduction of each operating business due to the executed structural reform plans.

Consolidated
Forecast of FY2017

(millions of yen)

	FY2016	FY2017 (forecast)		Full-year	Increase/ Decrease
	Full-year	1 st Half	2 nd Half		
Net Sales	¥88,580	¥47,000	¥48,000	¥95,000	¥ 6,420
Operating Income	1,131	3,100	3,600	6,700	5,569
Ordinary Income	1,702	3,500	4,300	7,800	6,098
Profit attributable to owners of the parent company	¥ (7,929)	¥ 4,700	¥ 3,500	¥ 8,200	¥16,129

Forecast announced on May 9, 2017

Average exchange rate:

2016: \$1 = ¥108.85

2017 (2Q onward): \$1 = ¥105.00 (Actual for 1Q: ¥113.64)

I. Status of Corporate Governance

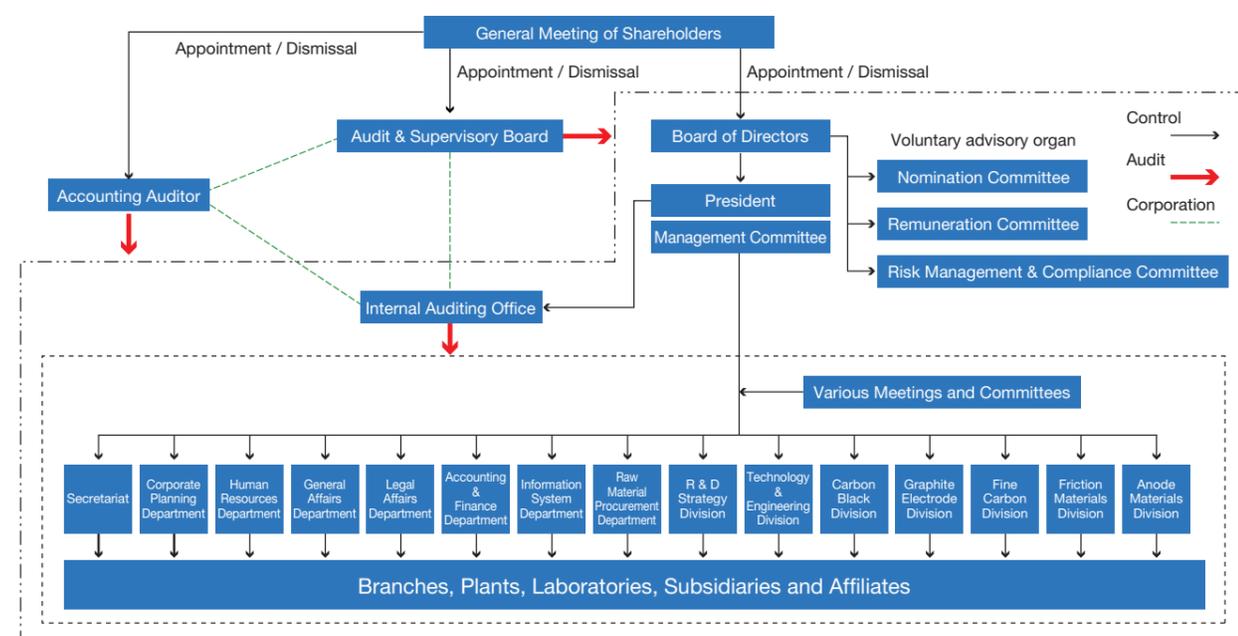
1. Basic views on corporate governance

Tokai Carbon recognizes that enhancing the corporate value over the mid-to-long term is the most important management objective and believes that responding to the expectations of all stakeholders, including customers and shareholders, and building favorable relationships with them, is essential in achieving the objective. To this end, the Company sets forth its basic corporate philosophy, “Ties of

Reliability.” Under this philosophy and taking into account the views defined in its Guidelines and Corporate Code of Ethics, the Company strives to develop an effective corporate governance structure.

Tokai Carbon’s corporate governance structure is illustrated as follows.

Tokai Carbon Corporate Governance Structure (Outline as of March 29, 2017)



2. Corporate governance system

Tokai Carbon, as a company with an Audit & Supervisory Board, operates under the basic stance of reinforcing audits by Audit & Supervisory Board Members and the internal audit function. It also makes efforts to strengthen management supervision functions of the Board of Directors by appointing multiple External Directors and establishing voluntary committees in order to realize an appropriate

corporate governance structure. In addition, from the perspective of clarifying the functions and responsibilities of corporate officers engaged in business execution, the Company has adopted the Executive Officer System and established a Managing Executives Meeting in an effort to enhance and strengthen business execution functions of the organization.

(1) Board of Directors

The Board of Directors is responsible for determining important management matters and supervising business execution and meets monthly as a general rule. As of the date of submission of this report, there are eight directors, of whom two are External Directors. The Company established the Nomination Committee and the Remuneration

Committee for which the majority of members are External Directors as a voluntary advisory organ of the Board of Directors effective March 30, 2016. Furthermore, we have put in place a voluntary Risk Management & Compliance Committee under the Board of Directors.

(2) Audit & Supervisory Board Members and the Audit & Supervisory Board

The Audit & Supervisory Board of the Company meets monthly as a general rule. As of the date of submission of this report, there are four Audit & Supervisory Board Members, of whom two are External Audit & Supervisory Board Members. Based on the auditing policy and the audit

plan resolved by the Audit & Supervisory Board, Audit & Supervisory Board Members perform audits of the status of execution of duties by Directors through attending meetings of the Board of Directors and other important meetings, and investigating the status of business operations and assets.

(3) Managing Executives Meeting

The Managing Executives Meeting is established under the Board of Directors to discuss and determine important matters concerning management based on basic policies determined by the Board of Directors. Under the Managing

Executives Meeting are the CSR Committee and other committees that complement the discussions of the Managing Executives Meeting through reporting the results of deliberation to the Managing Executives Meeting.

3. Status of Company functions and internal control system

(1) Status of establishment of internal control system

To ensure that the Tokai Carbon Group on the whole properly executes business operations in accordance with relevant laws, regulations and the articles of incorporation, the Company resolved at its meeting of the Board of Directors

in May 2006 to set forth the “Basic Policy for Establishing an Internal Control System.” As of the date of submission of this report, the Company continues to make improvements to its internal control system based on the Basic Policy.

Summary of Basic Policy for Establishing an Internal Control System

1. System to ensure that the execution of duties by Directors complies with laws, regulations and the articles of incorporation
2. System concerning storage and management of information associated with the execution of duties by Directors
3. Rules concerning management of risk of loss and other systems
4. System to ensure effective execution of duties by Directors
5. System to ensure that execution of duties by employees complies with laws, regulations and the articles of incorporation
6. System to ensure appropriateness of operations of the corporate entity consisting of the company and subsidiaries

7. Matters concerning employees assisting Audit & Supervisory Board Members with their duties and matters regarding independence of such employees from Directors, in the event that Audit & Supervisory Board Members request the assignment of such employees
8. System for reporting by Directors and employees to Audit & Supervisory Board Members, other systems concerning reporting to Audit & Supervisory Board Members and system to ensure that audits by Audit & Supervisory Board Members are performed effectively
9. System to ensure the reliability of financial reporting

(2) Status of internal audits and audits by Audit & Supervisory Board Members

The Company has established an Internal Auditing Office to serve as an internal auditing department. The Internal Auditing Office is in charge of improving and enhancing the internal control systems by performing internal audits on business operations of the Company and the Group companies. The Internal Auditing Office ensures it follows up on audits performed to see that recommendations for improvement have been implemented. Important audit results are reported to the Board of Directors.

In addition to attending the meetings of the Board of Directors and other important meetings to listen to Directors and Executive Officers report on the status of their duties

in accordance with the auditing policies, work allocations, etc. stipulated by the Audit & Supervisory Board, the Audit & Supervisory Board Members also review documents relating to important decisions. The Audit & Supervisory Board meeting was convened seventeen times during the fiscal year under review. The Audit & Supervisory Board Members also examine the status of business operations and assets at the Company and business locations, request reports on sales activities from subsidiaries as necessary, and strictly audit the status of execution of duties by Directors and Executive Officers.

The Audit & Supervisory Board Members and the

Internal Auditing Office periodically hold meetings and mutually review and exchange information on internal audit results, matters addressed and recommendations to promote close information exchange.

The Audit & Supervisory Board Members also hold meetings with the Accounting Auditors when necessary to exchange information and promote cooperation. The Audit & Supervisory Board Members hold discussions with Accounting Auditors in establishing auditing plans and attend the audits of the Accounting Auditors if necessary.

(3) Status of accounting audits

Tokai Carbon has a contract in place with the accounting audit firm Deloitte Touche Tohmatsu LLC regarding accounting audits pursuant to Japan's Companies Act and Financial Instruments and Exchange Act. The Accounting Auditors audit the account statements and financial statements from the standpoint of an independent third party and report the results of the audit to the Company. Arbitrary opinions on reviews and issues of internal control systems are then exchanged, and improvements are implemented in accordance with the recommendations. The Company also submits information and data to the Accounting Auditors in order to ensure an environment in which audits can be carried out swiftly and accurately. There are no special

(4) Relationship with External Directors and External Audit & Supervisory Board Members

The Company appoints two External Directors and two External Audit & Supervisory Board Members.

Although the Company has not set forth any independence standards or policies concerning External Directors and External Audit & Supervisory Board Members, it refers to the independence standard prescribed in the Guidelines for Listing of Tokyo Stock Exchange, Inc. when selecting candidates for the positions to appoint candidates who have no risk of causing conflicts of interest with general shareholders.

External Director Yoshio Kumakura satisfies the independence standard prescribed in the Guidelines for Listing and has no risk of causing conflicts of interest with general shareholders. Although External Director Nobumitsu Kambayashi is from Kawasaki Heavy Industries, Ltd., the Company's business partner, the firm accounts for only a very small percentage of the Company's overall business transactions, and Mr. Nobumitsu Kambayashi fulfills the independent standard prescribed in the Guidelines for Listing and has no risk of causing conflicts of interest with general shareholders. External Audit & Supervisory Board Member Seiichiro Sasao served as an executive officer of Mitsubishi UFJ Trust and Banking Corporation, the Company's correspondent bank, until March 2009. The Company has borrowings of ¥2,814 million (as of

They also receive reports and explanations regarding auditing processes and results, and audit consolidated and non-consolidated account statements and other necessary documents. Audit & Supervisory Board Member Tsunehisa Samukawa has served as the General Manager of the Company's Accounting & Finance Department while External Audit & Supervisory Board Member Yukihisa Asakawa has served as the General Manager of Accounting Department of another firm, and they both have significant knowledge of finance and accounting.

conflicts of interest between the Company and the aforesaid accounting audit firm and executive members of the said accounting audit firm who perform audits of the Company.

Names of certified public accountants who carried out the operations in the fiscal year under review and the composition of assistants for auditing operations are as provided below.

Names of certified public accountants who carried out the operations:

Designated Limited Liability Partner and Executive Member Hiroyuki Motegi and Saori Yamaguchi

Composition of assistants for auditing operations:

Eight certified public accountants, seven others

December 31, 2016) from Mitsubishi UFJ Trust and Banking Corporation, accounting for 2.30% (as of December 31, 2016) of the total assets of the bank, and the degree of dependence is low. The shareholding ratio of Mitsubishi UFJ Trust and Banking Corporation in the Company is 2.95% (as of December 31, 2016) which reflects a low level of influence on the Company. As a result, the Company has judged that there is no risk of causing conflicts of interest with general shareholders. External Auditor Yukihisa Asakawa satisfies the independence standard prescribed in the Guidelines for Listing and has no risk of causing conflicts of interest with general shareholders.

At meetings of the Board of Directors, External Directors and External Audit & Supervisory Board Members receive reports on the basic policy for establishing an internal control system, the status of relevant initiatives taken and their results.

Moreover, External Audit & Supervisory Board Members collaborate with other Audit & Supervisory Board Members in meetings of the Audit & Supervisory Board to conduct audits from multiple perspectives through mutual coordination with internal audits and accounting audits and with the departments responsible for internal control, as noted in "(2) Status of internal audits and audits by Audit & Supervisory Board Members."

4. Outline of limited liability agreement

The Company and its non-executive Directors (External Directors) and Audit & Supervisory Board Members enter into an agreement to limit the liability of damages stipulated in Article 423, Paragraph 1 of the Companies Act pursuant to Article 427, Paragraph 1 of the said Act. The amount of liability for damages under this agreement is the amount

stipulated in laws and regulations for both non-executive Director and Audit & Supervisory Board Member. This limit is applicable only when the performance of duties of an External Director or an External Audit & Supervisory Board Member is recognized to have been carried out in good faith and with no gross negligence.

5. Provisions of articles of incorporation allowing exemption of responsibility of Directors and Audit & Supervisory Board Members based on resolution of Board of Directors

The Company stipulates in its Articles of Incorporation provisions to allow exemption of responsibilities of Directors and Audit & Supervisory Board Members based on a resolution reached by the Board of Directors in accordance with

relevant laws and regulations so that Directors and Audit & Supervisory Board Members can fully demonstrate their expected roles in carrying out their duties.

6. Number of Directors

Tokai Carbon's articles of incorporation stipulate that the Company shall have no more than 13 Directors.

7. Appointment of Directors

The articles of incorporation stipulate that Directors shall be appointed only by a resolution of a meeting of shareholders holding at least one third of the voting rights and being eligible to vote, where the motion to appoint a Director is passed

by a majority of the voting rights. Moreover, the articles of incorporation further stipulate that a resolution to appoint a Director may not be decided by cumulative voting.

8. Acquisition of Treasury Stocks

The articles of incorporation stipulate that treasury stock may be acquired by a resolution of the Board of Directors as stipulated in Article 165, Paragraph 2, of the Companies Act. The objective of this is to enable the company to acquire its

own stock via market transactions in order to promote a flexible capital policy to cope with changes in the business management environment.

9. Interim Dividends

The articles of incorporation stipulate that Tokai Carbon may pay out surplus funds as dividends (interim dividends) in accordance with Article 454, Paragraph 5, of the

Companies Act upon a resolution of the Board of Directors. The objective of this is to provide a flexible return of profits to shareholders.

10. Requests for Extraordinary Resolutions during the General Meeting of Shareholders

The articles of incorporation stipulate that requests for extraordinary resolutions during the General Meeting of Shareholders as stipulated in Article 309, Paragraph 2, of the Companies Act may be passed only by a resolution of a meeting of shareholders holding at least one third of the voting rights and being

eligible to vote, where the resolution is passed by a two-third majority. The objective of this is to facilitate the smooth running of the General Meeting of Shareholders by relaxing the quorum requirements for extraordinary resolutions during the General Meeting of Shareholders.

11. Executive remuneration, etc.

(1) Total amounts of remuneration paid to Directors and Audit & Supervisory Board Members, total amounts by type of remuneration, and number of eligible recipients

Officer classification	Total amount of remuneration (Millions of yen)	Total amount of remuneration by type (Millions of yen)				Number of eligible recipients
		Basic remuneration	Stock options	Bonuses	Retirement allowances	
Directors (excluding External Directors)	¥150	¥135	—	¥15	—	7
Audit & Supervisory Board Members (excluding External Audit & Supervisory Board Members)	15	15	—	—	—	3
External Directors and External Audit & Supervisory Board Members	¥ 53	¥ 53	—	—	—	6

Notes: 1. It was resolved at the 144th General Meeting of Shareholders held on March 30, 2006 that the maximum amount of remuneration paid to Directors shall be no more than ¥350 million per year.
 2. It was resolved at the 144th General Meeting of Shareholders held on March 30, 2006 that the maximum amount of remuneration paid to Audit & Supervisory Board Members shall be no more than ¥65 million per year.
 3. The figures for the total remuneration amount and the number of eligible recipients include two (2) Directors and two (2) Audit & Supervisory Board Members who retired as of the close of the 154th General Meeting of Shareholders held on March 30, 2016.

(2) Policy for determining the amounts of remuneration for Directors and Audit & Supervisory Board Members

The remuneration for Directors and Audit & Supervisory Board Members of the Company consists of “basic remuneration,” which is the fixed portion, and “performance-linked remuneration,” which varies depending on the level of achievement of performance targets. For Directors who are responsible for business execution, the percentage of variable remuneration is set higher as the level of officer rises by taking into account the magnitude of management accountability of each Director and Audit & Supervisory Board Member.

The performance-linked remuneration consists of “bonus,” which is paid based on the level of achievement of financial performance each year, and “mid-to-long-term incentive” (performance cash) which is paid based on the magnitude of achievement of the three-year financial performance targets and on the evaluation of important initiatives taken that are unlikely to be clearly reflected on short-term financial results.

Since the performance-linked remuneration is not suitable for Directors and Audit & Supervisory Board Members who do not have concurrent executive responsibility and are independent from business execution, only fixed remuneration is paid to such Directors and Audit & Supervisory Board Members.

The amounts of remuneration are set within the maximum limits approved by the General Meeting of Shareholders and with the aim of having Directors and

Audit & Supervisory Board Members engaged in business execution be strongly committed to achieving high management targets and maximizing mid-to-long-term corporate value by fulfilling the following requirements set as targets in their respective roles. The Company’s policy is to pay amounts of remuneration that are in line with the operating performance of the Company and the outcome of performance of each individual.

- Remuneration for encouraging commitment of Directors and Audit & Supervisory Board Members toward short- and mid-to-long-term management targets
- Remuneration guaranteeing the level of remuneration that can motivate and retain incumbent and future candidates for Directors and Audit & Supervisory Board Members
- Remuneration guaranteeing the transparency and reasonableness in carrying out the responsibility of providing explanations to Directors, Audit & Supervisory Board Members, shareholders and investors

The Company has a mechanism in place where the Company’s system of remuneration for Directors and Audit & Supervisory Board Members, performance evaluation of each officer and determination of remuneration for officers are deliberated by the Remuneration Committee comprising an External Director as the chairperson and members including external individuals, and then revised as necessary and finalized. It is a highly transparent remuneration system that incorporates objective viewpoints.

(3) Total amount of consolidated remuneration paid to individual Directors and Audit & Supervisory Board Members

There is no data to disclose, since no Director or Audit & Supervisory Board Member received consolidated remuneration in excess of ¥100 million for the fiscal year under review.

12. Status of shareholding

Equity investment for which the purpose of holding is other than pure investment

Number of issues: 65

Total amount posted on the Balance Sheet: ¥17,376 million

II. Remuneration for Accounting Auditors

1. Remuneration for auditing certified public accountants, etc.

Classification	Previous fiscal year		Current fiscal year	
	Remuneration based on audit & attestation services (Millions of yen)	Remuneration based on non-audit services (Millions of yen)	Remuneration based on audit & attestation services (Millions of yen)	Remuneration based on non-audit services (Millions of yen)
Submitting company	¥58	¥0	¥60	¥0
Consolidated subsidiaries	9	—	9	—
Total	¥67	¥0	¥69	¥0

2. Other important remuneration

(Previous fiscal year)

The Company’s consolidated subsidiary paid remuneration of ¥37 million based on audit & attestation services and remuneration of ¥23 million based on non-audit services

to a member firm of Deloitte Touche Tohmatsu Limited that belongs to the same network of the Company’s auditing certified public accountants.

(Current fiscal year)

The Company’s consolidated subsidiary paid remuneration of ¥36 million based on audit & attestation services and remuneration of ¥23 million based on non-audit services

to a member firm of Deloitte Touche Tohmatsu Limited that belongs to the same network of the Company’s auditing certified public accountants.

3. Description of non-audit services by auditing certified public accountants toward the submitting company

(Previous fiscal year)

The non-auditing service for which the Company pays remuneration to auditing certified public accountants is

the application for exemption of surcharge for renewable energy promotion.

(Current fiscal year)

The non-auditing service for which the Company pays remuneration to auditing certified public accountants is

the application for exemption of surcharge for renewable energy promotion.

4. Policy for determining remuneration for auditors

Although the Company does not set forth a policy for determining the amount of remuneration for auditing certified public accountants, etc., the Company takes into

account auditing hours, etc. in determining the amount of remuneration.

The company has set “Basic Policy,” “Practice Guidelines,” and “Corporate Code of Ethics.” We conduct corporate activities with a highly ethical viewpoint while also complying

with the relevant laws, rules, and regulations based on those policies.

Compliance Manual

The Compliance Manual was prepared based on Tokai Carbon’s Corporate Code of Ethics and its Ethical and Compliance Standard. The manual outlines the standards of

behavior that all officers and employees should maintain as they carry out their everyday duties, and is intended to help everyone in the Company understand compliance properly.

Internal Reporting System

The company has an internal reporting system with both an internal contact point (Legal Affairs Department and Audit & Supervisory Board Member) and an external contact point (an advising attorney). The system allows employees to make reports and receive consultation by

various means including telephone, fax, email, and post. The Company’s Guidelines on Handling of Internal Reports clearly states that, apart for the cases when the system is deliberately misused, informants will not be dismissed or subjected to unfair treatment under this system.

Awareness-Raising and Education

Compliance training is held regularly for officers, managers, and new recruits, and facilitated by trainers from inside and outside the company. The company also strives to raise

awareness of compliance in officers and employees, by distributing the compliance message video internally and informing the related issue through the company newsletter.

I. Basic Policy on Selecting Accounting Standards

In consideration of securing comparability of consolidated financial statements between fiscal years and companies, the Tokai Carbon Group will prepare its consolidated financial statements in accordance with the Japanese accounting

standards for the time being. In the meantime, the Group will appropriately apply the International Financial Reporting Standards (IFRS) in consideration of various circumstances in Japan and overseas.

II. Method of Preparation for Consolidated Financial Statements and Financial Statements

- (1) The consolidated financial statements of the Company are prepared based on the Ordinance on Terminology, Forms and Preparation Methods of Consolidated Financial Statements (Ordinance of the Ministry of Finance No. 28 of 1976).
- (2) The financial statements of the Company are prepared based on the Ordinance on Terminology, Forms and

Preparation Methods of Financial Statements (Ordinance of the Ministry of Finance No. 59 of 1963). The Company corresponds to the Company Submitting Financial Statement under special provision and prepares financial statements pursuant to the provision of Article 127 of the Ordinance on Terminology, Forms and Preparation Methods of Financial Statements.

III. Audit Certificate

Pursuant to the provision of Article 193-2, Paragraph 1 of the Financial Instruments and Exchange Act, the Company receives audits from Deloitte Touche Tohmatsu LLC in regard to the consolidated financial statements for the

fiscal year from January 1, 2016 to December 31, 2016 and the financial statements for the 155th business year (from January 1, 2016 to December 31, 2016).

IV. Special Initiatives to Ensure the Appropriateness of Consolidated Financial Statements, etc.

The Company takes special initiatives to ensure the appropriateness of consolidated financial statements, etc. Specifically, in order to establish a system to properly identify the contents of accounting standards, etc. and to respond accurately to changes, etc. to accounting

standards, the Company is a member of the Financial Accounting Standards Foundation and also participates in seminars organized by the accounting firm, etc. and subscribes to accounting journals.

Consolidated Financial Statements

1. Consolidated Balance Sheets

TOKAI CARBON Co., Ltd. and Consolidated Subsidiaries
December 31, 2016 and 2015

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

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

Consolidated Financial Statements

2. Consolidated Statement of Operations and Comprehensive income

TOKAI CARBON Co., Ltd. and Consolidated Subsidiaries
December 31, 2016 and 2015

Consolidated Statements of Operations

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

Consolidated Statements of Comprehensive Income

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

Consolidated Financial Statements

3. Consolidated statements of changes in net assets

TOKAI CARBON Co., Ltd. and Consolidated Subsidiaries
December 31, 2016 and 2015

Fiscal year ended December 31, 2015 (January 1, 2015 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							9
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

Fiscal year ended December 31, 2016 (January 1, 2016 to December 31, 2016)

(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	¥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' equity					
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' equity	(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

4. Consolidated Statement of Cash Flows

TOKAI CARBON Co., Ltd. and Consolidated Subsidiaries
December 31, 2016 and 2015

	Millions of yen	
	2016	2015
Cash flows from operating activities		
Net income/(loss) before income taxes	¥ (7,938)	¥ 6,726
Depreciation and amortization	8,124	9,242
Impairment loss	10,707	4,326
Demolition expenses	—	106
Loss on sales of investment securities	(13)	(5,817)
Loss for liquidation of subsidiaries and associates	—	(189)
Contribution for liquidation of subsidiaries and associates	—	86
Loss on sales of shares of subsidiaries and associates	—	78
Special severance payments	314	—
Loss on sales of tangible assets	(1,383)	(1,070)
Amortization of goodwill	372	426
Increase (decrease) in allowance for doubtful accounts	429	(25)
Increase (decrease) in reserve for bonuses	(14)	13
Increase (decrease) in net defined benefit liability	65	(24)
Decrease (increase) in net defined benefit assets	70	(130)
Increase (decrease) in reserve for directors' retirements' benefit	(14)	(11)
Increase (decrease) in provision for environment and safety measures	4	(8)
Interest and dividends income	(500)	(678)
Interest paid	418	595
Foreign exchange (gain) losses	30	25
Equity in income (loss) of non-consolidated	(794)	(589)
Increase (decrease) in trade receivables	2,179	6,300
Increase (decrease) in inventories	12,611	5,698
Increase (decrease) in trade payables	(1,440)	(4,398)
Increase (decrease) in accrued expenses	(101)	145
Increase (decrease) in account payables	(441)	70
Increase (decrease) in advance payments	(655)	276
Increase (decrease) in consumption taxes payables	(140)	182
Other	(164)	948
Subtotal	21,724	22,305
Interest income and dividends received	597	875
Interest paid	(429)	(589)
Income taxes paid	(4,149)	(1,977)
Special severance payments	(236)	—
Net cash provided by (used in) operating activities	¥17,505	¥20,613

	Millions of yen	
	2016	2015
Cash flows from investing activities		
Payment into time deposits	¥ (0)	¥ (245)
Proceeds from withdrawal of time deposits	108	242
Net increase (decrease) in short-term borrowings	39	4
Purchase of tangible fixed assets	(5,168)	(5,909)
Proceeds from tangible fixed assets	1,610	1,699
Purchased of intangible assets	(227)	(152)
Proceeds from sales of investment securities	15	7,694
Payments for sales of investments in subsidiaries resulting in change in scope of consolidation	—	(44)
Payment on sales of shares of subsidiaries and associates	—	(86)
Other	(1)	(14)
Cash flow from investing activities	(3,622)	3,189
Cash flows from financing activities		
Net increase (decrease) in short-term borrowings	(4,156)	(11,452)
Income in long-term debt	—	4,000
Repayment of long-term debt	(2,068)	(6,071)
Payment of dividend	(1,279)	(1,279)
Payment attributable to non-controlling shareholders	(47)	(49)
Others	(61)	(73)
Cash flows from financing activities	(7,613)	(14,926)
Effect of exchange rate change on cash and cash equivalents	(667)	(695)
Increase (decrease) in cash and cash equivalents	5,602	8,180
Cash and cash equivalents at beginning of the period	22,919	14,738
Cash and cash equivalents at end of the period	¥28,521	¥22,919

5. Notes to the Consolidated Financial Statements

TOKAI CARBON Co., Ltd. and Consolidated Subsidiaries
December 31, 2016 and 2015

I. Notes on the Going-concern Assumption

Not applicable

II. Significant Matters for Preparation of Consolidated Financial Statements

1. Matters concerning scope of consolidation

a. Number of consolidated subsidiaries: 24

The names of consolidated subsidiaries are mentioned in Corporate Data (p. 44), and hence omitted here.

b. 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.

2. Matters concerning application of equity method

a. 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

b.

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.

c.

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

4. Matters concerning accounting policies

a. 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.

b. 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.

c. 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.

5. Notes to the Consolidated Financial Statements

TOKAI CARBON Co., Ltd. and Consolidated Subsidiaries
December 31, 2016 and 2015

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 shareholders 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.

d. 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.

e. 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.

f. 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:

- | | |
|--|--|
| <p>a Hedging instrument: Exchange contracts
Hedged items: Foreign currency receivables and forecast foreign currency transactions on exported products</p> | <p>b Hedging instrument: Interest Rate Currency Swaps, Interest Rate Swaps
Hedged items: Foreign currency denominated debt, Japanese currency denominated debt</p> |
|--|--|

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.

g. 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.

h. 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.

i. 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.

III. 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,

5. Notes to the Consolidated Financial Statements

TOKAI CARBON Co., Ltd. and Consolidated Subsidiaries
December 31, 2016 and 2015

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.	Gotemba-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 other manufacturing facilities	Machinery, equipment, and vehicles		Shibata-machi, Shibata-gun, Miyagi	0
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.

3) Breakdown of the amount and types of impairment loss

Buildings and structures	¥302 million	Land	¥39 million
Machinery, equipment, and vehicles	¥3,881 million	Construction in progress	¥91 million
Furnace	¥9 million	Other	¥3 million

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

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.

- 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.

5. Notes to the Consolidated Financial Statements

TOKAI CARBON Co., Ltd. and Consolidated Subsidiaries
December 31, 2016 and 2015

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	Tokai Carbon Co., Ltd.	Ashikita-machi, Ashikita-gun, Kumamoto	1,859
	Machinery, equipment, and vehicles			
	Construction in progress			
Fine carbon manufacturing facility	Buildings and structures	Tokai Carbon Co., Ltd.	Ashikita-machi, Ashikita-gun, Kumamoto	3,117
	Machinery, equipment, and vehicles			
	Furnace			
	Land			
	Construction in progress			
	Other			
Graphite electrode manufacturing facility	Software	Tokai Carbon Co., Ltd.	Omihachiman-city, Shiga	1,604
	Buildings and structures			
	Machinery, equipment, and vehicles			
	Furnace			
	Land			
Graphite electrode manufacturing facility	Other	Tokai Carbon Co., Ltd.	Hofu-shi, Yamaguchi	2,293
	Software			
	Buildings and structures			
	Machinery, equipment, and vehicles			
	Furnace			
Idle asset	Construction in progress	Tokai Carbon Co., Ltd.	Ashikita-machi, Ashikita-gun, Kumamoto	307
	Machinery, equipment, and vehicles			
Idle asset	Buildings and structures	Tokai Carbon Co., Ltd.	Ashikita-machi, Ashikita-gun, Kumamoto	1,111
	Machinery, equipment, and vehicles			
	Furnace			
	Construction in progress			
Idle asset	Other	Tokai Carbon Co., Ltd.	Ishinomaki-shi, Miyagki	20
	Machinery, equipment, and vehicles			
Idle asset	Buildings and structures	Tokai Carbon Co., Ltd.	Hofu-shi, Yamaguchi	13
	Machinery, equipment, and vehicles			
	Furnace			
	Other			
Asset to be sold	Software	Tokai Carbon Co., Ltd.	Taketoyo-machi, Chita-gun, Aichi	380
	Buildings and structures			
	Machinery, equipment, and vehicles			
	Land			
	Other			

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

Buildings and structures	¥4,603 million	Construction in progress	¥1,628 million
Machinery, equipment, and vehicles	¥3,124 million	Other	¥71 million
Furnace	¥290 million	Software	¥27 million
Land	¥961 million		

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.

6. Segment Information

TOKAI CARBON Co., Ltd. and Consolidated Subsidiaries
December 31, 2016 and 2015

I. 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 category 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 category. 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)								Amount on consolidated financial statement *3
	Reportable segment					Other operations *1	Total	Adjustments *2	
	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	0	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)

	(Millions of yen)								Amount on consolidated financial statement *3
	Reportable segment					Other operations *1	Total	Adjustments *2	
	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	25,588	23,557	6,152	112,158	11,342	123,500	35,323	158,824
Other Business									
Depreciation	3,449	1,838	1,474	176	6,939	731	7,671	452	8,124
Impairment loss	2,186	3,911	4,228	—	10,326	—	10,326	380	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	¥ 4,499	892	¥ 5,392	¥ 620	¥ 6,013

Note: 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 35,323 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 380 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.

6. Segment Information

TOKAI CARBON Co., Ltd. and Consolidated Subsidiaries
December 31, 2016 and 2015

II. 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

a. 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.

b. Tangible fixed assets

Millions of yen					
Japan	Canada	Asia	Europe	Other area	Total
¥35,219	¥5,325	¥11,062	¥3,933	¥1,086	¥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

a. 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.

b. Tangible fixed assets

Millions of yen					
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.

III. 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.

IV. 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

Consolidated Financial Statements

6. Segment Information

TOKAI CARBON Co., Ltd. and Consolidated Subsidiaries
December 31, 2016 and 2015

V. Information concerning profit on negative goodwill by reportable segment)

The previous fiscal year (From January 1, 2015 to December 31, 2015)
None

This fiscal year (From January 1, 2016 to December 31, 2016)
None

VI. 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)	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

VII. Significant subsequent events

None

VIII. 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.

Board of Directors, Executive Officers and Audit & Supervisory Board Members (as of March 29, 2017)

Board of Directors

President and Chief Executive Officer	Hajime Nagasaka
Senior Managing Executive Officer	Nobuyuki Murofushi
Managing Executive Officer	Masanao Hosoya
Executive Officers	Yuji Serizawa Masafumi Tsuji
Director	Kanji Sugihara
External Directors	Yoshio Kumakura Nobumitsu Kambayashi

Executive Officers

Managing Executive Officer	Toshiaki Fukuda
Executive Officer	Kazuhiko Matsubara
Executive Officer	Yuji Yamake

Audit & Supervisory Board Member

Seiichiro Sasao*
Yukihisa Asakawa*
Tsunehisa Samukawa
Kazuyuki Kakehashi

*External Member

Corporate Data (as of December 31, 2016)

Company Name	TOKAI CARBON CO., LTD.
Established	April 8, 1918
Paid-in Capital	20,436 million
Head Office	Aoyama Bldg. 2-3, Kita-Aoyama 1-Chome, Minato-ku, Tokyo 107-8636. Japan TEL: +81-3-3746-5100 FAX: +81-3-3405-7205 Web site: http://www.tokaicarbon.co.jp/
Number of Employees	1,980 (as a consolidated basis)
Branch Office	Osaka Branch (Osaka) Nagoya Branch (Aichi)

Laboratories	Fuji Research Laboratory (Shizuoka) Chita Laboratory (Aichi) Hofu Laboratory (Yamaguchi)
Plants in Japan	Ishinomaki Plant (Miyagi) Shonan Plant (Kanagawa) Chita Plant (Aichi) Shiga Plant (Shiga) Hofu Plant (Yamaguchi) Production Technology Center (Yamaguchi) Kyusyu Wakamatsu Plant (Fukuoka) Tanoura Plant (Kumamoto)

Corporate Data (as of March 31, 2017)

Group Companies and Affiliates

Country	Company
Consolidated Subsidiaries	
Japan	<ul style="list-style-type: none"> ● Tokai Konetsu Kogyo Co., Ltd. Head Office Kyoto Branch Sendai Plant ● Tokai Material Co., Ltd. Head Office/Plant Osaka Branch Nagoya Branch Fukuoka Branch Sapporo Office ● Tokai Fine Carbon Co., Ltd. Head Office Yamanashi Plant Osaka Office Kyusyu Office ● Oriental Sangyo Co., Ltd. ● Tokai Unyu Co., Ltd. ● Tokai Noshiro Seiko Co., Ltd. ● Tokai Konetsu Engineering Co., Ltd. ● Mitomo Brake Co., Ltd. ● Daiya Tsusho Co., Ltd. Head Office Sapporo Office Sendai Office Fukuoka Office Okinawa Office
Europe	
Consolidated Subsidiaries	
United Kingdom	● Tokai Carbon Europe Ltd.
Germany	<ul style="list-style-type: none"> ● Tokai ErftCarbon GmbH ● Tokai Carbon Europe GmbH ● Tokai Carbon Deutschland GmbH
Italy	● Tokai Carbon Italia S.R.L.
Affiliate Accounted for by Equity Method	
Sweden	● Schunk Tokai Scandinavia AB

North America	
Consolidated Subsidiaries	
U.S.A.	<ul style="list-style-type: none"> ● Tokai Carbon U.S.A., Inc. ● Tokai Carbon Electrode Sales LLC/Inc.
Affiliate Accounted for by Equity Method	
U.S.A.	● MWI, Inc.
Consolidated Subsidiary	
Canada	● Cancarb Limited
Asia	
Consolidated Subsidiaries	
China	<ul style="list-style-type: none"> ● Tokai Carbon (Tianjin) Co., Ltd. ● Tokai Carbon (Dalian) Co., Ltd. ● Tokai Carbon (Suzhou) Co., Ltd. ● Shanghai Tokai Konetsu Co., Ltd. ● Tokai Konetsu (Suzhou) Co., Ltd.
Affiliate Accounted for by Equity Method	
China	● SGL Tokai Carbon Ltd. Shanghai
Affiliate Accounted for by Equity Method	
Korea	● Tokai Carbon Korea Co., Ltd.
Consolidated Subsidiary	
Thailand	● Thai Tokai Carbon Product Co., Ltd.
Affiliate Accounted for by Equity Method	
Singapore	● SGL Tokai Process Technology Pte. Ltd.

- Carbon and Graphite Products
- Industrial Furnaces and Related Products
- Other

Investor Information (as of December 31, 2016)

Fiscal year end	December 31
General Meeting of Shareholders	March
Common Stock	Authorized Shares: 598,764,000 shares Outstanding Shares: 224,943,104 shares
Number of shareholders	14,343
Major shareholders	

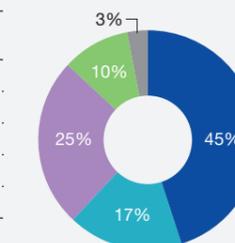
Shareholders	Number of shares held	%
The Master Trust Bank of Japan, Ltd. (Trust Account)	21,526,000	10.10
Japan Trustee Services Bank, Ltd. (Trust Account)	13,882,000	6.51
The Bank of Tokyo-Mitsubishi UFJ, Ltd.	7,958,000	3.73
Mitsubishi Corp.	6,748,000	3.17
Mitsubishi UFJ Trust and Banking Corp.	6,290,000	2.95
The Master Trust Bank of Japan, Ltd. (Mitsubishi Chemical Corp. Retirement Benefit Trust Account)	5,900,000	2.77
CBNY DFA INTL SMALL CAP VALUE PORTFOLIO	5,078,000	2.38
Japan Trustee Services Bank, Ltd. (Trust Account)	4,540,000	2.13
Deutsche Bank AG, Frankfurt	4,500,000	2.11
Tokio Marine & Nichido Fire Insurance Co., Ltd.	4,044,000	1.90

In addition to the above, Tokai Carbon Co., Ltd. holds treasury stock of 11,782,000 shares.

Stock Exchange Listing	First Section of the Tokyo Stock Exchange
Securities code number	5301
Transfer agent	Mitsubishi UFJ Trust and Banking Corp. Head Office: 4-5 Marunouchi 1-Chome, Chiyoda-ku, Tokyo, Japan

Ownership and Distribution of Shares

Shareholders	Number of shares held (thousand shares)
● Japanese Financial Institution	94,977
● Japanese Individuals and Others	36,896
● Foreign Investors	53,596
● Other Japanese Companies	20,331
● Japanese Securities Companies	7,357
Total	213,160



Note: 1. The number of shares are rounded down to the nearest 1,000 shares.
2. Treasury shares were excluded in the calculation of share ownership percentages.

TOKAI CARBON CO., LTD.

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