



February 14, 2019

## Consolidated Financial Results for the Fiscal Year Ended December 31, 2018 [Japanese GAAP]

Listed company name:	<b>Toyo Tanso Co., Ltd.</b>
Stock exchange listing:	Tokyo Stock Exchange, 1st Section
Stock code:	5310
Website:	<a href="http://www.toyotanso.co.jp">http://www.toyotanso.co.jp</a>
Representative:	Naotaka Kondo, Representative Director, Chairman & President, CEO
Contact:	Shigeki Masuda, General Manager, Finance and Accounting Department
TEL:	81-6-6472-5811 (from overseas)
Scheduled date for ordinary general meeting of shareholders:	March 28, 2019
Scheduled date for dividend payment:	March 29, 2019
Scheduled date for submission of securities report:	March 29, 2019
Supplementary materials for financial summaries:	Yes
Financial results briefing:	Yes (for securities analysts and institutional investors)

### 1. Consolidated financial results for the fiscal year ended December 31, 2018

(From January 1, 2018 to December 31, 2018)

#### (1) Operating results

(Millions of yen, rounded down)

(Percentages indicate year-on-year changes.)

	Net sales		Operating income		Ordinary income		Profit attributable to owners of parent	
		%		%		%		%
Fiscal year ended December 31, 2018	41,132	16.7	7,009	89.0	7,057	89.7	4,910	62.5
Fiscal year ended December 31, 2017	35,240	8.6	3,708	468.2	3,719	390.0	3,020	963.0

Note: Comprehensive income:  
 Fiscal year ended December 31, 2018      3,581 million yen (3.0%)  
 Fiscal year ended December 31, 2017      3,478 million yen (-%)

	Profit attributable to owners of parent per share (basic)	Profit attributable to owners of parent per share (diluted)	Return on Equity	Ordinary income/total assets	Operating income/net sales
	yen	yen	%	%	%
Fiscal year ended December 31, 2018	234.52	-	8.0	9.5	17.0
Fiscal year ended December 31, 2017	145.52	145.25	5.2	5.2	10.5

Reference: Equity in earnings of affiliates  
 December 31, 2018      85 million yen  
 December 31, 2017      102 million yen

**(2) Financial position**

(Millions of yen, rounded down)

	Total assets	Net assets	Equity ratio	Net assets per share
			%	yen
As of December 31, 2018	74,986	64,096	84.5	3,019.47
As of December 31, 2017	74,223	60,986	81.0	2,884.66

Reference: Shareholders' equity

December 31, 2018	63,326 million yen
December 31, 2017	60,140 million yen

**(3) Cash flows**

(Millions of yen, rounded down)

	Cash flows from operating activities	Cash flows from investing activities	Cash flows from financing activities	Cash and cash equivalents at end of period
Fiscal year ended December 31, 2018	5,759	(4,318)	(1,169)	6,414
Fiscal year ended December 31, 2017	6,972	(5,951)	(1,216)	6,361

**2. Dividends**

(Millions of yen, rounded down)

	Dividends per share (yen)					Total dividends (annual)	Payout ratio (consolidated)	Ratio of dividends to net assets (consolidated)
	First quarter -end	Second quarter -end	Third quarter -end	Year -end	Total (Full year)			
	yen	yen	yen	yen	yen			
Year ended December 31, 2017	-	0.00	-	30.00	30.00	625	20.6	1.1
Year ended December 31, 2018	-	0.00	-	50.00	50.00	1,048	21.3	1.7
Year ending December 31, 2019 (Forecast)	-	0.00	-	50.00	50.00		30.0	

**3. Consolidated results forecast for the fiscal year ending December 31, 2019**

(From January 1, 2019 to December 31, 2019)

(Millions of yen, rounded down)

(Percentages indicate year-on-year changes.)

	Net sales		Operating income		Ordinary income		Profit attributable to owners of parent		Profit attributable to owners of parent per share
		%		%		%		%	yen
Six months ending June 30, 2019	19,500	(11.6)	2,400	(42.6)	2,400	(41.4)	1,700	(44.4)	81.06
Fiscal year ending December 31, 2019	40,000	(2.8)	5,000	(28.7)	5,000	(29.2)	3,500	(28.7)	166.88

**\* Others**

**(1) Changes in significant subsidiaries during the period under review:**

(Changes in specified subsidiaries accompanying changes in scope of consolidation): None

New subsidiaries: \_\_\_ (name of company(ies))

Excluded subsidiaries: \_\_\_ (name of company(ies))

**(2) Changes in accounting policies and accounting estimates and restatements**

1) Changes in accounting policies due to revisions of accounting standards, etc.: None

2) Changes in accounting policies other than 1): None

3) Changes in accounting estimates: None

4) Restatements: None

**(3) Number of shares outstanding (common stock)**

1) Number of shares outstanding at the end of period (including treasury shares)

As of December 31, 2018 20,992,588 shares

As of December 31, 2017 20,865,488 shares

2) Number of treasury shares at the end of period

As of December 31, 2018 19,769 shares

As of December 31, 2017 17,219 shares

3) Average number of shares during the period

Fiscal year ended December 31, 2018 20,937,250 shares

Fiscal year ended December 31, 2017 20,759,629 shares

**Reference: SUMMARY OF NON-CONSOLIDATED FINANCIAL STATEMENTS**

**Non-consolidated financial results for the fiscal year ended December 31, 2018**

(From January 1, 2018 to December 31, 2018)

**(1) Operating results**

(Millions of yen, rounded down)  
(Percentages indicate year-on-year changes.)

	Net sales		Operating income		Ordinary income		Net income	
		%		%		%		%
Fiscal year ended December 31, 2018	29,615	21.8	4,517	113.7	5,650	123.1	4,032	116.1
Fiscal year ended December 31, 2017	24,324	6.2	2,113	-	2,533	792.6	1,866	923.7

	Net income per share	Diluted net income per share
	yen	yen
Fiscal year ended December 31, 2018	192.61	-
Fiscal year ended December 31, 2017	89.89	89.73

(Note) Since y-o-y change rate in operating income in the fiscal year ended on December 31, 2017 exceeds 1,000%, it is indicated with “-.”

**(2) Financial position**

(Millions of yen, rounded down)

	Total assets	Net assets	Equity ratio	Net assets per share
			%	yen
As of December 31, 2018	57,985	49,099	84.7	2,341.10
As of December 31, 2017	55,799	45,611	81.6	2,184.76

Reference: Shareholders' equity

December 31, 2018 49,099 million yen

December 31, 2017 45,548 million yen

**\* The financial results report is not subject to audit procedures by a certified public accountant or an audit corporation.**

**\* Disclaimer regarding appropriate use of forecasts and related points of note**

(We urge you to be cautious in relying on forward-looking statements.)

Forward-looking statements such as the earnings forecasts in this material are based on currently available information and certain assumptions deemed rational, and are not intended as a guarantee that these forecasts will be achieved. Accordingly, actual results may differ significantly from these forecasts due to various factors. For more information on the preconditions of the forecasts and on precautionary notes concerning the usage of these forecasts, please refer to “(4) Forecasts” under “1. Overview of Business Results” on page 4 of the Attached Documents.

(How to acquire supplementary materials for financial summaries and information disclosed at our financial results briefing)

We are scheduled to hold a financial results briefing for securities analysts and institutional investors on February 20, 2019. The materials distributed at the briefing are scheduled to be disclosed on TDnet and our website on that same day.

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## **1. Overview of Business Results**

### **(1) Overview of Business Results in the Fiscal Year Ended December 31, 2018**

In the consolidated fiscal year under review, the US economy continued to recover on the back of an increase in personal consumption, while Europe continued to experience a favorable recovery, despite concerns due to the UK's exit from the EU. Emerging economies performed well despite mounting concerns of a slowing Chinese economy. Nevertheless, escalation of US-China trade disputes has given rise to a lingering sense of uncertainty regarding the global economy. Meanwhile, despite concerns about the economic impact of a series of natural disasters, the Japanese economy made a gradual recovery thanks to improvements in corporate earnings and employment conditions.

In the business environment surrounding the Group, demand for products for wafer manufacturing products increased on the back of a strong semiconductor market, and also in the transportation equipment market, demand was solid for EDM electrodes for cars and pantograph sliders for trains. In the energy-related market, demand for solar cells lowered due to a shift in Chinese governmental policy.

In this environment, although competition with other companies remains harsh and conditions are still difficult, the Group is working to achieve its medium-term business plan by reinforcing production and sales of high value-added products, and improving productivity.

Inspections of the delivery of graphite materials for the Chinese high-temperature reactor-pebble-bed modules (HTR-PM), ordered in 2008, were completed in the first quarter of the consolidated fiscal year under review. Sales totaling 3,204 million yen were recorded.

As a result, in the consolidated fiscal year under review, net sales rose 16.7% year on year to 41,132 million yen, operating income rose 89.0% to 7,009 million yen, ordinary income rose 89.7% to 7,057 million yen, and profit attributable to owners of parent rose 62.5% to 4,910 million yen.

The overall performance of each business segment was as follows. (Please refer to "6. Others" for an overview of each product category.)

#### **Japan**

Products for semiconductor and LED applications did well, carbon products for metallurgical, and mechanical applications remained solid overall, and 2,651 million yen was recorded in sales for Chinese high-temperature reactor-pebble-bed modules (HTR-PM). As a result, net sales rose 23.2% to 22,218 million yen, and operating income rose 101.6% to 4,784 million yen.

#### **United States**

Although sales of solar cell applications fell significantly, sales of products for electronic-related applications were strong due to good performance of semiconductor and LED applications, metallurgical applications remained solid, and we endeavored to improve earnings. As a result, net sales rose 15.8% to 2,941 million yen and operating income was 594 million yen (compared to a 134 million yen operating loss in the same period of the previous fiscal year).

#### **Europe**

Strong sales of products for electronics-related applications and solid sales of metallurgical applications resulted in an 8.7% increase in net sales to 3,283 million yen. However, higher costs due to reinforced infrastructure resulted in a 290 million yen operating loss (compared to an 18 million yen operating loss in the same period of the previous fiscal year).

#### **Asia**

Although sales of carbon brush products and solar cell applications were weak, sales for metallurgical applications remained strong. Additionally, 553 million yen was recorded in sales for Chinese high-temperature reactor-pebble-bed modules (HTR-PM). As a result, net sales rose 9.0% to 12,689 million yen and operating income increased 74.1% to 2,110 million yen.

## **(2) Overview of Financial Position in the Fiscal Year Ended December 31, 2018**

### **Assets, Liabilities, and Net Assets**

Total assets as of the end of the consolidated fiscal year under review increased by 762 million yen from the end of the previous consolidated fiscal year. This was primarily because, although property, plant and equipment fell by 1,139 million yen as a result of depreciation and impairment loss posted and inventories decreased by 784 million yen, cash and deposits increased by 1,979 million yen and accounts receivable - trade increased by 1,019 million yen.

Total liabilities decreased by 2,347 million yen from the end of the previous consolidated fiscal year. This was primarily because, although electronically recorded obligations – operating increased by 219 million yen and accounts payable - other increased by 328 million yen, interest-bearing liabilities decreased by 688 million yen and Other of current liabilities decreased by 2,397 million yen due to a decrease in advances received for the recorded sales for the Chinese high-temperature reactor–pebble-bed modules (HTR-PM).

Total net assets increased by 3,110 million yen from the end of the previous consolidated fiscal year. This was primarily because, although foreign currency translation adjustments decreased by 1,078 million yen, retained earnings increased by 4,284 million yen.

## **(3) Overview of Cash Flows in the Fiscal Year Ended December 31, 2018**

Cash and cash equivalents (hereinafter referred to as “funds”) as of December 31, 2018, increased by 53 million yen from the end of the previous consolidated fiscal year to 6,414 million yen on a consolidated basis.

### **(Cash Flows from Operating Activities)**

Funds acquired by operating activities totaled 5,759 million yen, a 17.4% decrease year on year. This was primarily because funds increased due to profit before income taxes of 6,584 million yen (a 68.6% year-on-year increase), depreciation of 2,959 million yen (a 8.2% decrease), an increase in notes and accounts payable - trade of 618 million yen (a 240.3% increase), and impairment loss of 534 million yen (not recorded in the previous fiscal year), offsetting a decrease in funds due to an increase in notes and accounts payable - trade of 1,517 million yen (a 27.5% decrease), an increase in Income taxes paid of 1,479 million yen (a 507.7% increase), and an Other decrease of 2,522 million yen (compared to a 1,120 million yen increase in the previous fiscal year) such as a decrease in advances received due to recorded sales for the Chinese high-temperature reactor–pebble-bed modules (HTR-PM).

### **(Cash Flows from Investing Activities)**

Funds used in investment activities totaled 4,318 million yen, a 27.4% decrease year on year. This was primarily due to a decrease in funds from payments into time deposits of 12,068 million yen (a 17.4% increase year on year) and purchase of property, plants and equipment of 2,272 million yen (a 12.8% increase), which offset an increase in funds from proceeds from withdrawals of time deposits of 10,014 million yen (a 47.1% increase).

### **(Cash Flows from Financing Activities)**

Funds used in financing activities amounted to 1,169 million yen, a 3.9% decrease year on year. This was primarily due to a decrease in funds, including 625 million yen in cash dividends paid (a 20.7% increase) and a net decrease in short-term loans payable of 541 million yen (a 799.6% increase).

#### **(4) Forecasts**

We expect the business environment in Japan and abroad to hold firm overall amid a scenario whereby the employment environment in the US remains solid, despite concerns involving adverse effects of protectionism, and whereby the European economy is subject to uncertainties, particularly regarding the prospect of issues on the UK's exit from the EU dragging on. Meanwhile, there are still uncertainties with respect to overseas economies particularly amid concerns that US-China trade disputes could slow the Chinese economy, which had been a global economic driver.

In Japan, corporate earnings and employment environment capital investment are improving favorably, but there are concerns about economic trends such as uncertainties in the global economy, and changes in raw fuel prices and exchange rates.

In the business environment in which we operate, demand for our mainstay products, such as special graphite products, is solid, but we expect harsh competition with other companies to continue. Under such conditions, the Group established TVC 2022, a medium-term management plan released on February 14, 2018, and has accordingly been enhancing its competitive strengths in existing businesses and expanding into new business domains, thereby shifting course to a path of further growth based on the action plan it has drawn up.

In view of the above factors, we expect net sales of 40,000 million yen, 5,000 million yen in operating income, 5,000 million yen in ordinary income, and 3,500 million yen in profit attributable to owners of parent in the fiscal year ending December 31, 2019.

Our earnings forecasts have been made on the assumption of exchange rates of 105 yen/US\$, 125 yen/EUR and 15.5 yen/CNY.

#### **(5) Basic Policy for Profit Allocation and Dividends for the Fiscal Year Ended December 31, 2018 and the Fiscal Year Ending December 31, 2019**

##### **(i) Basic Policy**

Our basic policy for profit allocation is to make strategic investments in order to strengthen our competitiveness and enhance our value over the long term and return profits to shareholders in a continuous and stable fashion with due consideration of business results for the fiscal year, funding needs for the future expansion of our business operations, and consolidation of our business foundation. We intend to use internal reserves for capital expenditures for production facilities, development of new products, and investment in research and development.

##### **(ii) Dividends for the Fiscal Year Ended December 31, 2018**

Based on the aforementioned policy and our business results in the fiscal year under review, we plan to increase dividends by 20 yen to pay a dividend of 50 yen per share for the fiscal year ended December 31, 2018.

##### **(iii) Dividends for the Fiscal Year Ending December 31, 2019**

For our next round of dividends, in the interest of improving the return of profits to shareholders while also taking into account our capital investment plan aimed at future growth, we plan to pay a dividend of 50 yen per share for the fiscal year ending December 31, 2019.

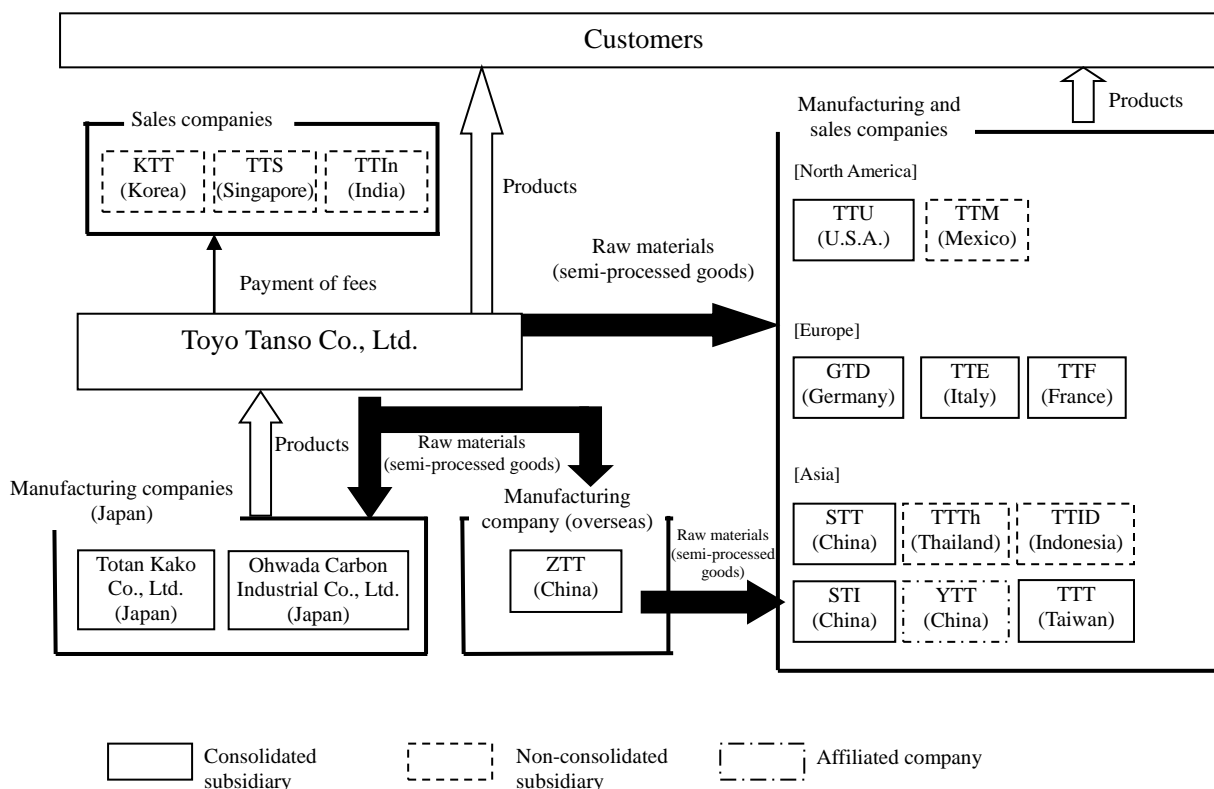


## 2. Composition of Corporate Group

The Toyo Tanso Group consists of Toyo Tanso Co., Ltd., ten consolidated subsidiaries, including two domestic and eight foreign companies, six foreign non-consolidated subsidiaries, and one overseas affiliated company accounted for using the equity method.

[Business Flow Chart]

The business flow chart of the Toyo Tanso Group is as follows. Only major business relations are indicated in this chart.



The formal names of the companies represented by the acronyms used in the chart above are as follows:

Company name	(TTU) ... Toyo Tanso USA, Inc.
	(TTE) ... Toyo Tanso Europe S.p.A.
	(TTF) ... Toyo Tanso France S.A.
	(GTD) ... GTD Graphit Technologie GmbH
	(STT) ... Shanghai Toyo Tanso Co., Ltd.
	(STI) ... Shanghai Toyo Tanso Industrial Co., Ltd.
	(ZTT) ... Toyo Tanso (Zhejiang) Co., Ltd.
	(TTT) ... Toyo Tanso Taiwan Co., Ltd.
	(YTT) ... Shanghai Yongxin Toyo Tanso Co., Ltd.
	(KTT) ... Toyo Tanso Korea Co., Ltd.
	(TTTh) ... Toyo Tanso (Thailand) Co., Ltd.
	(TTS) ... Toyo Tanso Singapore Pte. Ltd.
	(TTIn) ... Toyo Tanso India Private Limited
	(TTM) ... Toyo Tanso Mexico, S.A. de C.V.
	(TTID) ... PT. Toyo Tanso Indonesia

### **3. Management Policy**

#### **(1) Basic Policies for the Management of the Company**

The Group is dedicated to unlocking the potential of carbon to contribute to the world. We aim to serve as a company that gives back to society broadly by providing the highest quality and most advanced technology before anyone else and making people's lives more rich, without forgetting the pioneering spirit that seeks to create products never before seen—the spirit that has been with the Group since it was founded.

#### **(2) Target management indicators and Medium- to Long-Term Management Strategies and Issues to Address**

In the business environment surrounding the Group, we are facing intensifying competition associated with volatility in demand for our special graphite products and other mainstay products. Accordingly, we expect the intense competitive environment to persist over the medium to long term going forward. Meanwhile, although we anticipate a market environment where electronics applications as well as general industries applications, such as those in the auto industry, will be subject to a temporary adjustment phase, we also expect greater new business opportunities due to technological innovation. We are also aware of challenges faced internally by the Group involving propensities of our business structure particularly in terms of having an operating environment dependent on special graphite products, having an earnings structure affected by circumstances in the electronics market, and undertaking business expansion with a disproportionate emphasis toward Asia.

The Group has established an action plan geared to better implementing the TVC 2022 medium-term management plan released on February 14, 2018, with the aim of achieving further growth amid efforts that involve resolving corporate issues while responding to medium- to long-term environmental changes. Under the medium-term management plan, the period through 2022 has been positioned as a phase of transformation to growth. This will entail promoting initiatives that involve shifting to higher value-added products, enhancing and innovating product technologies, and reinforcing overseas expansion efforts, with the aims of building stable foundations of business that do not rely on specific markets and improving production efficiency to achieve a leap forward in the future. In so doing, we will transition away from our current business structure with the aims of building pillars of growth and enhancing the earnings platform, establishing a consistent portfolio, and making the leap to becoming a global company.

As for target management indicators under the plan, we are striving to achieve results in 2022 that include net sales of 50 billion yen and an operating income of 8 billion yen in our mainstay existing businesses, and ROE of at least 8% on a Company-wide basis.

#### **4. Basic Approach to Selection of Accounting Standards**

The Group will prepare its consolidated financial statements in line with Japanese standards for the near term, given that these standards enable comparison of consolidated financial statements across fiscal periods and between companies.

We plan to respond appropriately to the adoption of international accounting standards, taking into account conditions in Japan and overseas.

## 5. Consolidated Financial Statements and Notes

### (1) Consolidated Balance Sheets

(Millions of yen, rounded down)

	As of December 31, 2017	As of December 31, 2018
<b>Assets</b>		
Current assets		
Cash and deposits	15,906	17,885
Notes and accounts receivable - trade	14,255	15,274
Merchandise and finished goods	5,423	6,420
Work in process	7,801	5,619
Raw materials and supplies	2,246	2,646
Deferred tax assets	944	812
Other	396	557
Allowance for doubtful accounts	(273)	(245)
Total current assets	46,700	48,972
Non-current assets		
Property, plant and equipment		
Buildings and structures	19,025	19,153
Accumulated depreciation	(10,315)	(10,586)
Buildings and structures, net	8,710	8,566
Machinery, equipment and vehicles	48,153	48,564
Accumulated depreciation	(40,321)	(41,617)
Machinery, equipment and vehicles, net	7,832	6,946
Land	5,850	5,816
Construction in progress	1,422	1,315
Other	4,694	4,781
Accumulated depreciation	(3,867)	(3,924)
Other, net	827	857
Total property, plant and equipment	24,642	23,502
Intangible assets	885	729
Investments and other assets		
Investment securities	514	320
Deferred tax assets	36	197
Net defined benefit asset	454	283
Other	1,129	1,116
Allowance for doubtful accounts	(139)	(136)
Total investments and other assets	1,995	1,781
Total non-current assets	27,523	26,013
<b>Total assets</b>	<b>74,223</b>	<b>74,986</b>

(Millions of yen, rounded down)

	As of December 31, 2017	As of December 31, 2018
<b>Liabilities</b>		
Current liabilities		
Notes and accounts payable - trade	2,113	2,275
Electronically recorded obligations - operating	1,105	1,325
Short-term loans payable	831	402
Accounts payable - other	1,594	1,923
Income taxes payable	926	1,028
Provision for bonuses	441	560
Provision for directors' bonuses	22	33
Other	4,833	2,436
<b>Total current liabilities</b>	<b>11,869</b>	<b>9,985</b>
Non-current liabilities		
Long-term loans payable	362	103
Deferred tax liabilities	282	157
Net defined benefit liability	141	131
Asset retirement obligations	267	264
Other	311	246
<b>Total non-current liabilities</b>	<b>1,366</b>	<b>903</b>
<b>Total liabilities</b>	<b>13,236</b>	<b>10,889</b>
<b>Net assets</b>		
Shareholders' equity		
Capital stock	7,810	7,947
Capital surplus	9,652	9,789
Retained earnings	40,536	44,821
Treasury shares	(59)	(59)
<b>Total shareholders' equity</b>	<b>57,940</b>	<b>62,498</b>
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	233	103
Foreign currency translation adjustment	1,965	886
Remeasurements of defined benefit plans	0	(162)
<b>Total accumulated other comprehensive income</b>	<b>2,199</b>	<b>828</b>
Subscription rights to shares	63	—
Non-controlling interests	783	770
<b>Total net assets</b>	<b>60,986</b>	<b>64,096</b>
<b>Total liabilities and net assets</b>	<b>74,223</b>	<b>74,986</b>

**(2) Consolidated Statement of Income and Consolidated Statement of Comprehensive Income**  
**(Consolidated statement of income)**

(Millions of yen, rounded down)

	Fiscal year ended December 31, 2017	Fiscal year ended December 31, 2018
Net sales	35,240	41,132
Cost of sales	24,943	27,171
Gross profit	10,296	13,960
Selling, general and administrative expenses	6,588	6,951
Operating income	3,708	7,009
Non-operating income		
Interest income	58	51
Dividend income	19	36
Share of profit of entities accounted for using equity method	102	85
Revenue from sales of electric power	46	46
Contracted research income	—	128
Other	107	91
Total non-operating income	334	440
Non-operating expenses		
Interest expenses	25	12
Foreign exchange losses	69	207
Loss on misappropriation	186	—
Contracted research expenses	—	113
Other	42	58
Total non-operating expenses	322	392
Ordinary income	3,719	7,057
Extraordinary income		
Gain on sales of non-current assets	105	73
Gain on sales of investments in capital of subsidiaries and associates	87	—
Subsidy income	178	64
Gain on liquidation of subsidiaries and associates	—	10
Gain on reversal of subscription rights to shares	0	13
Total extraordinary income	371	161
Extraordinary losses		
Loss on sales of non-current assets	1	1
Loss on retirement of non-current assets	121	98
Loss on valuation of shares of subsidiaries and associates	62	—
Impairment loss	—	* 534
Total extraordinary losses	185	634
Profit before income taxes	3,905	6,584
Income taxes - current	1,034	1,631
Income taxes - deferred	(275)	(39)
Total income taxes	759	1,592
Profit	3,146	4,992
Profit attributable to non-controlling interests	125	82
Profit attributable to owners of parent	3,020	4,910

**(Consolidated statement of comprehensive income)**

(Millions of yen, rounded down)

	Fiscal year ended December 31, 2017	Fiscal year ended December 31, 2018
Profit	3,146	4,992
Other comprehensive income		
Valuation difference on available-for-sale securities	114	(130)
Foreign currency translation adjustment	94	(1,072)
Remeasurements of defined benefit plans, net of tax	102	(162)
Share of other comprehensive income of entities accounted for using equity method	20	(46)
Total other comprehensive income	332	(1,410)
Comprehensive income	3,478	3,581
Comprehensive income attributable to		
Owners of parent	3,591	3,538
Non-controlling interests	(112)	43

### (3) Consolidated Statement of Changes in Equity

Fiscal year ended December 31, 2017

(Millions of yen, rounded down)

	Shareholders' equity				
	Capital stock	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity
Balance at beginning of period	7,692	9,534	38,034	(59)	55,201
Changes of items during period					
Issuance of new shares (exercise of stock options)	98	98			197
Stock compensation with transfer restrictions	19	19			38
Dividends of surplus			(518)		(518)
Profit attributable to owners of parent			3,020		3,020
Purchase of treasury shares				(0)	(0)
Net changes of items other than shareholders' equity					
Total changes of items during period	117	117	2,502	(0)	2,738
Balance at end of period	7,810	9,652	40,536	(59)	57,940

	Accumulated other comprehensive income				Subscription rights to shares	Non-controlling interests	Total net assets
	Valuation difference on available-for-sale securities	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income			
Balance at beginning of period	119	1,613	(102)	1,629	100	1,249	58,182
Changes of items during period							
Issuance of new shares (exercise of stock options)							197
Stock compensation with transfer restrictions							38
Dividends of surplus							(518)
Profit attributable to owners of parent							3,020
Purchase of treasury shares							(0)
Net changes of items other than shareholders' equity	114	352	103	570	(37)	(466)	66
Total changes of items during period	114	352	103	570	(37)	(466)	2,804
Balance at end of period	233	1,965	0	2,199	63	783	60,986

Fiscal year ended December 31, 2018

(Millions of yen, rounded down)

	Shareholders' equity				
	Capital stock	Capital surplus	Retained earnings	Treasury shares	Total shareholders' equity
Balance at beginning of period	7,810	9,652	40,536	(59)	57,940
Changes of items during period					
Issuance of new shares (exercise of stock options)	136	136			273
Stock compensation with transfer restrictions					—
Dividends of surplus			(625)		(625)
Profit attributable to owners of parent			4,910		4,910
Purchase of treasury shares				(0)	(0)
Net changes of items other than shareholders' equity					
Total changes of items during period	136	136	4,284	(0)	4,558
Balance at end of period	7,947	9,789	44,821	(59)	62,498

	Accumulated other comprehensive income				Subscription rights to shares	Non-controlling interests	Total net assets
	Valuation difference on available-for-sale securities	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income			
Balance at beginning of period	233	1,965	0	2,199	63	783	60,986
Changes of items during period							
Issuance of new shares (exercise of stock options)							273
Stock compensation with transfer restrictions							—
Dividends of surplus							(625)
Profit attributable to owners of parent							4,910
Purchase of treasury shares							(0)
Net changes of items other than shareholders' equity	(130)	(1,078)	(162)	(1,371)	(63)	(13)	(1,448)
Total changes of items during period	(130)	(1,078)	(162)	(1,371)	(63)	(13)	3,110
Balance at end of period	103	886	(162)	828	—	770	64,096



#### (4) Consolidated Statement of Cash Flows

(Millions of yen, rounded down)

	Fiscal year ended December 31, 2017	Fiscal year ended December 31, 2018
<b>Cash flows from operating activities</b>		
Profit before income taxes	3,905	6,584
Depreciation	3,223	2,959
Impairment loss	-	534
Share of (profit) loss of entities accounted for using equity method	(101)	(85)
Increase (decrease) in net defined benefit asset or liability	29	(65)
Increase (decrease) in provision for bonuses	86	130
Increase (decrease) in provision for directors' bonuses	22	10
Increase (decrease) in allowance for doubtful accounts	(6)	(15)
Interest and dividend income	(77)	(88)
Interest expenses	25	12
Foreign exchange losses (gains)	27	69
Loss on valuation of shares of subsidiaries and associates	62	-
Gain on sales of non-current assets	(105)	(73)
Gain on sales of investments in capital of subsidiaries and associates	(87)	-
Loss on sales and retirement of non-current assets	123	99
Decrease (increase) in notes and accounts receivable - trade	(2,091)	(1,517)
Decrease (increase) in inventories	804	497
Increase (decrease) in notes and accounts payable - trade	181	618
Other, net	1,120	(2,522)
Subtotal	7,143	7,151
Interest and dividend income received	100	96
Interest expenses paid	(27)	(9)
Income taxes (paid) refund	(243)	(1,479)
Net cash provided by (used in) operating activities	6,972	5,759
<b>Cash flows from investing activities</b>		
Payments into time deposits	(10,276)	(12,068)
Proceeds from withdrawal of time deposits	6,808	10,014
Purchase of property, plant and equipment	(2,015)	(2,272)
Proceeds from sales of property, plant and equipment	122	74
Purchase of intangible assets	(29)	(22)
Payments for sales of investments in capital of subsidiaries and associates resulting in change in scope of consolidation	(590)	-
Other, net	29	(43)
Net cash provided by (used in) investing activities	(5,951)	(4,318)
<b>Cash flows from financing activities</b>		
Net increase (decrease) in short-term loans payable	(60)	(541)
Repayments of long-term loans payable	(742)	(111)
Repayments of finance lease obligations	(40)	(36)
Proceeds from issuance of shares resulting from exercise of subscription rights to shares	182	201
Purchase of treasury shares	(0)	(0)
Cash dividends paid	(518)	(625)
Dividends paid to non-controlling interests	(37)	(56)
Net cash provided by (used in) financing activities	(1,216)	(1,169)
Effect of exchange rate change on cash and cash equivalents	131	(217)
Net increase (decrease) in cash and cash equivalents	(63)	53
Cash and cash equivalents at beginning of period	6,424	6,361
Cash and cash equivalents at end of period	6,361	6,414

## (5) Notes to the Consolidated Financial Statements

(Notes regarding the premise of a going concern)

Not applicable.

(Significant items that form the basis of preparations for consolidated financial statements)

### 1. Items concerning the scope of consolidation

#### (1) Number of consolidated subsidiaries: 10

Names of consolidated subsidiaries

Totan Kako Co., Ltd.  
Ohwada Carbon Industrial Co., Ltd.  
Toyo Tanso USA, Inc.  
Toyo Tanso Europe S.p.A.  
Toyo Tanso France S.A.  
GTD Graphit Technologie GmbH  
Shanghai Toyo Tanso Co., Ltd.  
Shanghai Toyo Tanso Industrial Co., Ltd.  
Toyo Tanso (Zhejiang) Co., Ltd.  
Toyo Tanso Taiwan Co., Ltd.

#### (2) Names of non-consolidated subsidiaries

Non-consolidated subsidiaries

Toyo Tanso Korea Co., Ltd.  
Toyo Tanso (Thailand) Co., Ltd.  
Toyo Tanso Singapore Pte. Ltd.  
Toyo Tanso India Private Limited  
Toyo Tanso Mexico, S.A. de C.V.  
PT. Toyo Tanso Indonesia

(Reason for exclusion from the scope of consolidation)

Non-consolidated subsidiaries were not included in the scope of consolidation because their total assets, net sales, net income (loss; amount corresponding to equity), and retained earnings (amount corresponding to equity) do not have a material impact on the consolidated financial statements.

### 2. Items concerning the application of the equity method

#### (1) Number of affiliated companies accounted for using the equity method: 1

Significant affiliated companies accounted for using the equity method  
Shanghai Yongxin Toyo Tanso Co., Ltd.

#### (2) Because non-consolidated subsidiaries have very little impact on net income (loss; amount corresponding to equity) or retained earnings (amount corresponding to equity) and have no materiality overall, the equity method has not been applied to the investment account for these companies, and they have instead been valued at cost.

There are six non-consolidated subsidiaries to which the equity method has not been applied: Toyo Tanso Korea Co., Ltd., Toyo Tanso (Thailand) Co., Ltd., Toyo Tanso Singapore Pte. Ltd., Toyo Tanso India Private Limited, Toyo Tanso Mexico, S.A. de C.V., and PT. Toyo Tanso Indonesia.

### 3. Items concerning the business years of subsidiaries

The closing date for all consolidated subsidiaries is in line with the consolidated closing date.

#### 4. Items concerning accounting policies

##### (1) Valuation standards and method for significant assets

###### a. Securities

###### (a) Shares of subsidiaries and affiliates

Stated at cost using the moving average method

###### (b) Other securities

Securities with a readily determinable fair value

Stated at fair value based on market price on the consolidated closing date (valuation differences are treated through the partial direct net asset adjustment method and sales costs are calculated with the moving average method)

Securities without a readily determinable fair value

Stated at cost using the moving average method

###### b. Derivatives

Stated at fair value

###### c. Inventories

###### (a) Merchandise and raw materials

Mainly stated at cost using the moving average method

(The carrying amount on the balance sheet is reduced for decreases in profitability.)

###### (b) Finished goods, work in process, and semi-finished goods

Mainly stated at individual cost

(The carrying amount on the balance sheet is reduced for decreases in profitability.)

###### (c) Supplies

Mainly stated at cost based on the last purchase price

(The carrying amount on the balance sheet is reduced for decreases in profitability.)

##### (2) Depreciation method for significant depreciable assets

###### a. Property, plant and equipment (excluding leased assets)

The straight-line method is used.

The main useful lives are as follows.

Buildings and structures: 3 to 50 years

Machinery, equipment and vehicles: 4 to 9 years

###### b. Intangible assets (excluding leased assets)

The straight-line method is used. However, the straight-line method is used for software (in-house use) based on the in-house use period (five years).

###### c. Leased assets

Leased assets in financial lease transactions without transfer of ownership

The straight-line method is applied for useful lives for the lease period, with a residual value of zero.

##### (3) Criteria for posting significant reserves

###### a. Allowance for doubtful accounts

To make allowance for losses on uncollectible accounts, the expected uncollectible amount is posted based on the loss ratio for general receivables and by individually examining the collectability of specific doubtful accounts.

###### b. Provision for bonuses

The Toyo Tanso Group posts the liability amount of expected payments for the current consolidated fiscal year to provide for bonuses paid to employees.

###### c. Provision for directors' bonuses

The Toyo Tanso Group posts the expected payment amount to provide for bonuses paid to directors.

(4) Accounting policies for retirement benefits

a. Attribution method for projected retirement benefits

The benefit formula method is used to attribute projected retirement benefits to periods until the fiscal year-end.

b. Amortization of actuarial differences and unrecognized prior service costs

Actuarial differences are treated as a lump-sum expense in the following consolidated fiscal year.

c. Adoption of simplified methods for small-scale companies

Some consolidated companies adopt a simplified method in which the amount paid for voluntary termination is posted as retirement benefit obligations when calculating net defined benefit liabilities and retirement benefit expenses.

(5) Standards for converting significant foreign currency-denominated assets and liabilities to Japanese yen

Foreign currency-denominated receivables and payables are converted to yen at the spot exchange rate on the consolidated closing date and the translation adjustment is treated as a profit or loss. The assets and liabilities of overseas subsidiaries are converted to yen at the spot exchange rate on the consolidated closing date, and revenue and expenses are converted to yen at the average annual exchange rate. Translation differences are then posted as part of non-controlling interests and foreign currency translation adjustment in net assets.

(6) Scope of funds contained within the consolidated statement of cash flows

Cash on hand, deposits that can be withdrawn at any time, and short-term investments with high liquidity that can easily be converted to cash and have maturities within three months of acquisition that are exposed to only a minimal price fluctuation risk are posted.

(7) Other material items relating to the preparation of the consolidated financial statements

Accounting treatment for consumption taxes

The tax-excluded method is used.

(Consolidated statement of income)

\* Impairment loss

**Previous consolidated fiscal year (From January 1, 2017 to December 31, 2017)**

Not applicable.

**Current consolidated fiscal year (from January 1, 2018 to December 31, 2018)**

The Group posted impairment losses on the following assets in the current consolidated fiscal year.

(i) Assets for which impairment losses were recognized

(Millions of yen, rounded down)

Type	Type	Name of Company	Location	Impairment loss
Business assets	Machinery, equipment and vehicles	Toyo Tanso Co., Ltd.	Toyo Tanso Technology Center (Kanonji, Kagawa)	497
	Construction in progress			
	Property, plant and equipment (other)			
Business assets	Construction in progress	Toyo Tanso (Zhejiang) Co., Ltd.	Pinghu, Zhejiang, China	37

(ii) Reasons for recognition of impairment losses

The Company has recognized an impairment loss with respect to some facilities of Toyo Tanso Technology Center in order to put such facilities to use as research and development facilities, upon having deemed that changes in the market environment make the prospect of recovering their capital investment unlikely, thereby posing difficulties in terms of executing initial business plans.

The Company has also recognized an impairment loss with respect to Toyo Tanso (Zhejiang) Co., Ltd. amid a situation where it no longer intends to use production facilities under construction given that they will lack initially specified capabilities.

(iii) Impairment loss amounts and amounts by type of primary non-current assets

Machinery, equipment and vehicles: 292 million yen

Construction in progress: 48 million yen

Property, plant and equipment (other): 194 million yen

(iv) Grouping method

The Company groups its assets into the smallest unit that generates cash flow independently and for which income and expenditure can be continuously ascertained.

Toyo Tanso (Zhejiang) Co., Ltd. groups its assets into the smallest unit that generates cash flow independently.

(v) Method for calculating recoverable amount

The recoverable amount for the Company's business assets is calculated primarily by using the usable value, but the recoverable amount is set at zero since the usable value based on future cash flow is negative.

The recoverable amount for the business assets of Toyo Tanso (Zhejiang) Co., Ltd. is calculated primarily by using the usable value, but the recoverable amount is set at zero since the usable value based on future cash flow is negative.

(Segment information)

[Segment information]

### 1. Reportable Segments

The reportable segments of the Toyo Tanso Group are business components for which separate financial information is available and whose operating results are regularly reviewed by the Board of Directors in order to decide on the allocation of management resources and evaluate performance.

The Company primarily engages in the manufacture and sale of carbon products, in Japan through Toyo Tanso and domestic subsidiaries, and abroad through overseas subsidiaries based in the United States, Europe, and Asia. All overseas subsidiaries are independently managed companies. They conduct business by formulating their own comprehensive regional strategies for the products they handle.

For this reason, our business is composed of segments that are based on region-based production and sales frameworks, and is categorized into the four reportable segments of Japan, United States, Europe, and Asia.

### 2. Calculation methods of net sales, profits, losses, assets, and other items by reportable segment

The accounting methods of reportable segments are by and large the same as those described in “Significant items that form the basis of preparations for consolidated financial statements.”

Profits of reportable segments are recorded on an operating income basis.

Inter-segment sales are based on prices in arms-length transactions.

### 3. Information on net sales, profits, losses, assets, and other items by reportable segment

#### Previous consolidated fiscal year (From January 1, 2017 to December 31, 2017)

(Millions of yen, rounded down)

	Reportable segments					Adjusted amount (Note) 1	Amount recorded in the consolidated income statement (Note) 2
	Japan	United States	Europe	Asia	Total		
Net sales							
(1) Sales to unaffiliated customers	18,032	2,540	3,021	11,646	35,240	—	35,240
(2) Inter-segment sales or transfers	6,312	89	22	133	6,557	(6,557)	—
Total	24,344	2,629	3,043	11,779	41,798	(6,557)	35,240
Segment profit (loss)	2,373	(134)	(18)	1,212	3,433	275	3,708
Segment assets	60,474	1,683	4,859	18,101	85,118	(10,895)	74,223
Other items							
(1) Depreciation	2,665	58	167	333	3,225	(2)	3,223
(2) Increase in property, plant and equipment and intangible assets	1,157	69	898	96	2,221	—	2,221

(Notes) 1. The adjusted amounts are as follows:

(1) Adjusted segment profit (loss) mainly takes into account the elimination of inter-segment transactions and unrealized income.

(2) Adjusted segment assets mainly take into account the elimination of inter-segment transactions and unrealized income.

2. Segment profit (loss) has been adjusted to reflect the operating income recorded in the consolidated statement of income.

## Current consolidated fiscal year (From January 1, 2018 to December 31, 2018)

(Millions of yen, rounded down)

	Reportable segments					Adjusted amount (Note) 1	Amount recorded in the consolidated income statement (Note) 2
	Japan	United States	Europe	Asia	Total		
Net sales							
(1) Sales to unaffiliated customers	22,218	2,941	3,283	12,689	41,132	—	41,132
(2) Inter-segment sales or transfers	7,425	382	0	309	8,117	(8,117)	—
Total	29,644	3,324	3,283	12,998	49,250	(8,117)	41,132
Segment profit (loss)	4,784	594	(290)	2,110	7,199	(189)	7,009
Segment assets	62,776	1,978	4,512	17,648	86,916	(11,930)	74,986
Other items							
(1) Depreciation	2,383	58	194	325	2,961	(2)	2,959
(2) Increases in tangible and intangible fixed assets	2,220	15	363	54	2,653	—	2,653

(Notes) 1. The adjusted amounts are as follows:

- (1) Adjusted segment profit (loss) mainly takes into account the elimination of inter-segment transactions and unrealized income.
  - (2) Adjusted segment assets mainly take into account the elimination of inter-segment transactions and unrealized income.
2. Segment profit (loss) has been adjusted to reflect the operating income recorded in the consolidated statement of income.

[Related information]

## Previous consolidated fiscal year (From January 1, 2017 to December 31, 2017)

### 1. Information by product and service

This information has been omitted because the entire business of the Company and its subsidiaries falls under the single business category of carbon product-related business.

### 2. Information by region

#### (1) Net sales

(Millions of yen, rounded down)

	Japan	North America	Europe	Asia		Rest of world	Total
				Asia (including China)	China only		
Net sales	14,029	2,840	3,201	14,989	10,851	179	35,240
Composition (%)	39.8	8.1	9.1	42.5	30.8	0.5	100.0

(Notes) 1. Net sales are based on the locations of our customers, and are categorized into the relevant country or region segment according to geographical proximity.

2. The major countries or regions included in each geographic segment are listed below.

- (1) North America: United States
- (2) Europe: France, Germany, Italy
- (3) Asia: China, Taiwan, South Korea

#### (2) Property, plant and equipment

(Millions of yen, rounded down)

Japan	United States	Europe	Asia	Total
18,511	305	2,271	3,553	24,642

### 3. Information by major customer

This information has been omitted because we do not have any unaffiliated customers that have accounted for more than 10% of sales in the consolidated statement of income.

**Current consolidated fiscal year (From January 1, 2018 to December 31, 2018)**

## 1. Information by product and service

This information has been omitted because the entire business of the Company and its subsidiaries falls under the single business category of carbon product-related business.

## 2. Information by region

## (1) Net sales

(Millions of yen, rounded down)

	Japan	North America	Europe	Asia		Rest of world	Total
				Asia (including China)	China only		
Sales	15,198	3,054	3,659	19,048	14,592	171	41,132
Composition (%)	37.0	7.4	8.9	46.3	35.5	0.4	100.0

(Notes) 1. Net sales are based on the locations of our customers, and are categorized into the relevant country or region segment according to geographical proximity.

2. The major countries or regions included in each geographic segment are listed below.

(1) North America: United States

(2) Europe: France, Germany, Italy

(3) Asia: China, Taiwan, South Korea

## (2) Property, plant and equipment

(Millions of yen, rounded down)

	Japan	United States	Europe	Asia	Total
	17,896	265	2,295	3,045	23,502

## 3. Information by major customer

This information has been omitted because we do not have any unaffiliated customers that have accounted for more than 10% of sales in the consolidated statement of income.

[Information on impairment loss for non-current assets by reportable segment]

**Previous consolidated fiscal year (From January 1, 2017 to December 31, 2017)**

Not applicable.

**Current consolidated fiscal year (From January 1, 2018 to December 31, 2018)**

(Millions of yen, rounded down)

	Japan	United States	Europe	Asia	Total
Impairment loss	497	-	-	37	534

[Information on the amortization of goodwill and unamortized balance by reportable segment]

**Previous consolidated fiscal year (From January 1, 2017 to December 31, 2017)**

Not applicable.

**Current consolidated fiscal year (From January 1, 2018 to December 31, 2018)**

Not applicable.

[Information on gain on bargain purchase by reportable segment]

**Previous consolidated fiscal year (From January 1, 2017 to December 31, 2017)**

Not applicable.

**Current consolidated fiscal year (From January 1, 2018 to December 31, 2018)**

Not applicable.



## (Per share information)

	From January 1, 2017 to December 31, 2017	From January 1, 2018 to December 31, 2018
Net assets per share	2,884.66 yen	3,019.47 yen
Profit attributable to owners of parent per share (basic)	145.52 yen	234.52 yen
Profit attributable to owners of parent per share (diluted)	145.25 yen	- yen

- (Notes)
1. Profit attributable to owners of parent per share (diluted) in the consolidated fiscal year under review is not noted, as there are no residual shares outstanding.
  2. The basis for calculating profit attributable to owners of parent per share (basic) and profit attributable to owners of parent per share (diluted) is outlined below.

	From January 1, 2017 to December 31, 2017	From January 1, 2018 to December 31, 2018
Profit attributable to owners of parent per share (basic)		
Profit attributable to owners of parent (millions of yen)	3,020	4,910
Amount not attributed to common shareholders (millions of yen)	-	-
Profit attributable to owners of parent related to common shares (millions of yen)	3,020	4,910
Average outstanding shares during the fiscal year (shares)	20,759,629	20,937,250
Profit attributable to owners of parent per share (diluted)		
Adjustments to profit attributable to owners of parent (millions of yen)	-	-
Increase in shares outstanding (shares)	37,948	-
Overview of potential shares that were not included in the calculation of profit attributable to owners of parent per share (diluted) because they have no dilutive effects	-	-

## (Significant subsequent events)

Not applicable.

## 6. Others

### (1) Orders and Sales by Product Category

#### i. Orders

(Unit: millions of yen)

Products	Year ended December 31, 2017					Year ended December 31, 2018				
	1Q	2Q	3Q	4Q	Fiscal year total	1Q	2Q	3Q	4Q	Fiscal year total
Special graphite products	3,306	3,599	4,300	4,565	15,772	4,636	4,261	3,777	3,825	16,502
Carbon products for general industries*2 (for mechanical applications)	1,320	504	417	912	3,154	911	848	970	968	3,698
Carbon products for general industries (for electrical applications)	1,235	1,353	1,352	1,405	5,345	1,276	1,308	1,141	1,059	4,785
Compound materials and other products	2,300	2,408	2,771	2,525	10,004	3,382	2,959	2,755	2,543	11,641
Total	8,161	7,865	8,841	9,408	34,277	10,208	9,377	8,645	8,396	36,627

\*1 These orders were denominated in foreign currency prior to the previous quarter; discrepancies resulting from fluctuations in foreign exchange rates during the quarter under review are included in the figure for orders placed in this quarter.

\*2 Data for general carbon products (carbon for mechanical applications) includes orders that have not been officially confirmed.

#### ii. Outstanding orders

(Unit: millions of yen)

Products	Year ended December 31, 2017				Year ended December 31, 2018			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Special graphite products*2	4,937	5,041	5,546	5,994	3,159	3,299	2,984	3,381
Carbon products for general industries*3 (for mechanical applications)	1,209	918	551	584	648	622	729	733
Carbon products for general industries (for electrical applications)	876	902	911	975	981	977	894	849
Compound materials and other products	1,987	2,193	2,503	2,589	3,664	4,057	4,229	4,234
Total	9,011	9,056	9,513	10,144	8,453	8,957	8,836	9,198

\*1 These orders were denominated in foreign currency prior to the previous quarter; discrepancies resulting from fluctuations in foreign exchange rates during the quarter under review are included in the figure for orders placed in this quarter.

\*2 Outstanding orders for special graphite products in the year ended December 31, 2017 include orders for the Chinese high-temperature reactor-pebble-bed modules (HTR-PM).

\*3 Data for general carbon products (carbon for mechanical applications) includes orders that have not been officially confirmed.

### iii. Sales performance by product category

(Unit: millions of yen)

Products	Year ended December 31, 2017					Year ended December 31, 2018				
	1Q	2Q	3Q	4Q	Fiscal year total	1Q	2Q	3Q	4Q	Fiscal year total
Special graphite products	3,655	3,768	4,168	4,499	16,093	7,248	4,521	4,464	4,019	20,254
[Electronics applications]	1,301	1,327	1,538	1,884	6,052	1,392	1,775	1,587	1,445	6,200
[General industries applications]	1,996	2,083	2,246	2,177	8,505	2,232	2,306	2,394	2,160	9,093
[Others]	357	357	383	437	1,535	3,624	439	483	413	4,959
Carbon products for general industries (for mechanical applications)	791	822	815	909	3,339	873	894	883	1,005	3,656
Carbon products for general industries (for electrical applications)	1,293	1,321	1,348	1,348	5,311	1,292	1,293	1,214	1,189	4,991
Compound materials and other products	2,171	2,209	2,476	2,457	9,314	2,384	2,518	2,592	2,579	10,075
[3 major products]	1,897	1,943	2,193	2,145	8,179	2,083	2,256	2,206	2,220	8,767
[Other products]	274	266	283	311	1,134	300	262	385	359	1,307
Related goods	202	327	319	331	1,182	536	493	551	574	2,155
Total	8,115	8,449	9,128	9,546	35,240	12,335	9,720	9,707	9,368	41,132

## (2) Overview

### Special graphite products

In electronics applications, although sales of products for solar cell applications were low in the second half due to the impact of a shift in Chinese governmental policy, semiconductor applications performed well. As a result, performance surpassed that in the previous fiscal year.

In general industries applications, although demand for products for EDM electrodes fell short of levels in the previous fiscal year, demand for products for industrial furnaces was strong due to solid capital investment in the automotive industry. As a result, sales exceeded the previous year.

In addition, with the recording of 3,204 million yen in sales for Chinese high-temperature reactor-pebble-bed modules (HTR-PM), special graphite products overall performed substantially better than in the previous fiscal year.

### Carbon products for general industries

Sales of carbon products for mechanical applications surpassed those of the previous fiscal year with strong ongoing demand for mainstay products such as bearings, seal materials, and pantograph sliders.

Carbon products for electrical applications fell short of their performance in the previous fiscal year due to low demand for small motor applications such as electrical power tools and cleaner applications.

Therefore, performance of carbon products for general industries overall was in line with the previous fiscal year.

### Compound materials and other products

Sales of SiC (silicon carbide)-coated graphite products exceeded levels in the previous fiscal year due to strong performance of semiconductor applications and LED applications. C/C composite products exceeded their performance in the previous fiscal year, as demand for semiconductor applications was strong and demand for industrial furnace applications was steady, although demand for solar cell applications were low. Sales of graphite sheet products were in line with the same period of the previous fiscal year due to solid demand for automotive applications.

Therefore, compound materials and other products overall performed better than in the previous fiscal year.

**(3) Changes of executives**

The disclosure information will be released once it has been finalized.