Q2 FY2020 Earnings Presentation 2020/8/5



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I

Q2 FY2020

Financial Summary

FY2020 Summary (January-June 2020)

Business Environment and Events

- The economic recession ensuing from the COVID-19 pandemic materially impacted the Q2 financial results
- Our two core business Graphite electrode and Carbon black was severely depressed by decline in demand of steel industry and tire industry. On the other hand, demand for Fine carbon and Industrial furnaces was strong due to the growth of 5G/IoT-related markets.
- Under these circumstances, Tokai Carbon deployed the measures to improve profitability by company-wide investment restraint, production adjustment/inventory reduction, productivity improvement/cost reduction and took financial measures to secure liquidity.
- Completed acquisition of all shares of Carbone Savoie International SAS, which owns Carbone Savoie SAS, a French carbon graphite product manufacturer (July 17, 2020)
- Issued the second hybrid corporate bond (subordinated corporate bond) through public offering (June 30, 2020)
- Tanoura Plant (Kumamoto Prefecture), a manufacturing site to produce material for the fine carbon business, was damaged by heavy rain in July 4, 2020. Restoration of production facilities will be in late August apart from the graphitization furnace where the fire broke out. Impact on supply chain is limited due to effective utilization of production facilities and inventory within the group.

Operating Trends

Net Sales

¥93.7 billion (decreased 32.6% YoY)

- Lower sales volume and price (Graphite electrodes and Carbon black)
- > Tokai COBEX contributes to the consolidated company sales from August 2019

Operating income

¥5.8 billion (decreased 85.6% YoY)

Summary of Consolidated Results

- Net sales ¥93.7 billion, Operating income ¥5.8 billion, ROS 6.2%
- Net sales and Operating income decreased YoY

(Millions of yen)

	Jan-Jun 2019	Jan-Jun 2020	YoY Change	%Change
Net sales	139,176	93,738	▲ 45,438	▲32.6%
Operating income	40,441	5,817	▲34,623	▲85.6%
Ordinary income	40,562	5,163	▲35,399	▲87.3%
Net income attributable to owners of the parent company	26,067	2,158	▲ 23,908	▲ 91.7%

Group companies (As of June 30, 2020)

Consolidated subsidiaries: 33

Equity method affiliates: 2

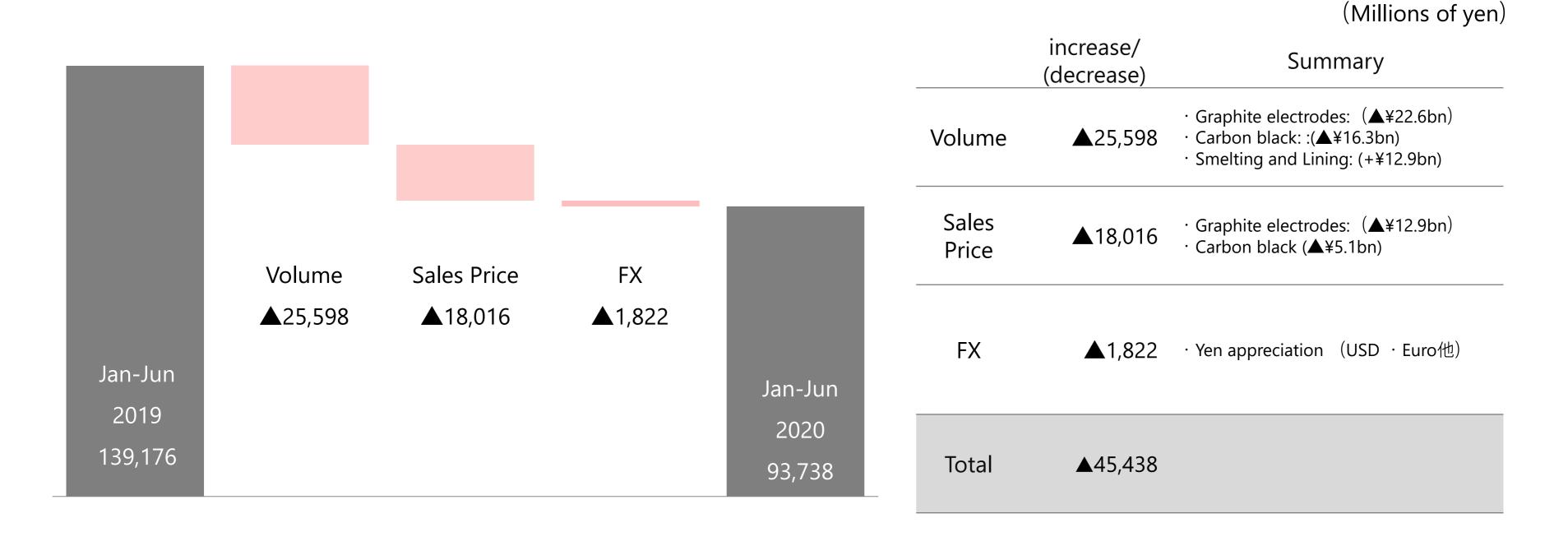
Average exchange rates:

■ 2019 USD1=¥110.05, EUR1=¥124.32

■ 2020 USD1=¥108.27, EUR1=¥119.3

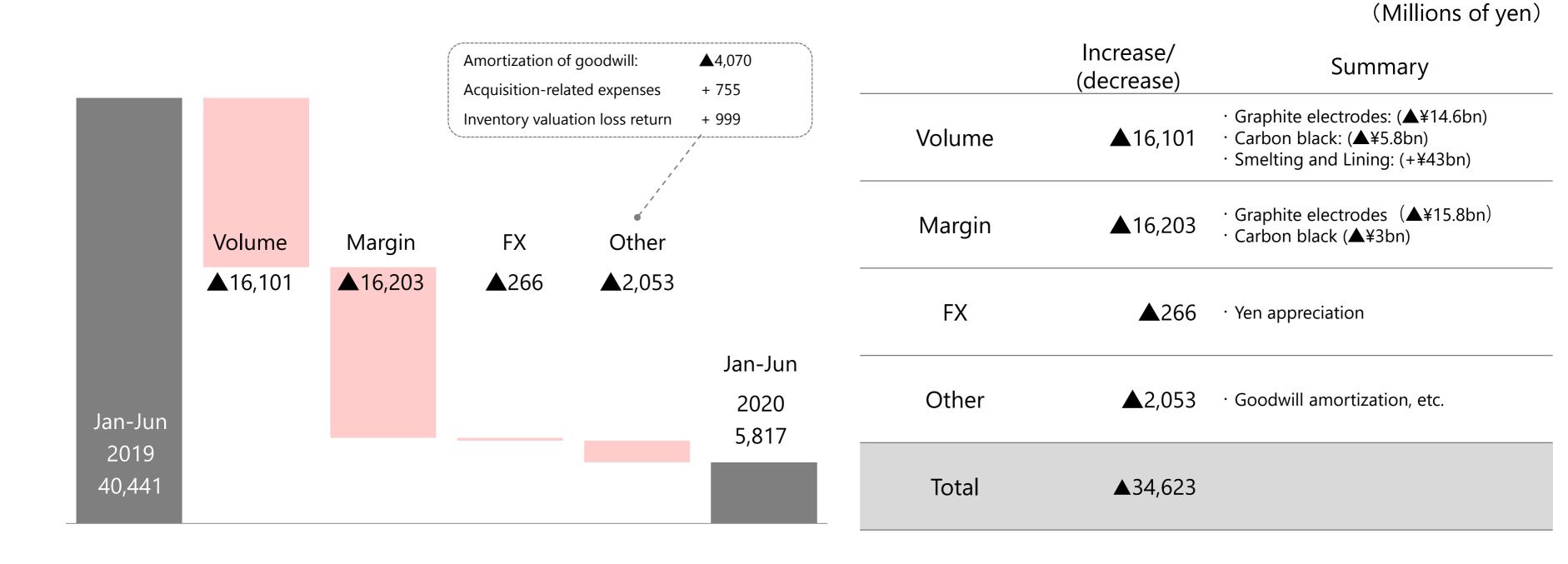
YoY Analysis: Net Sales

- Lower sales volume and lower margin (Graphite electrodes and Carbon black)
- Results in, Net sales decline 32.6% YoY



YoY Analysis: Operating Income

- Lower sales volume and lower margin (Graphite electrodes and Carbon black)
- Result in, Operating income decline 85.6% YoY



Net Sales and Operating Income by Segment

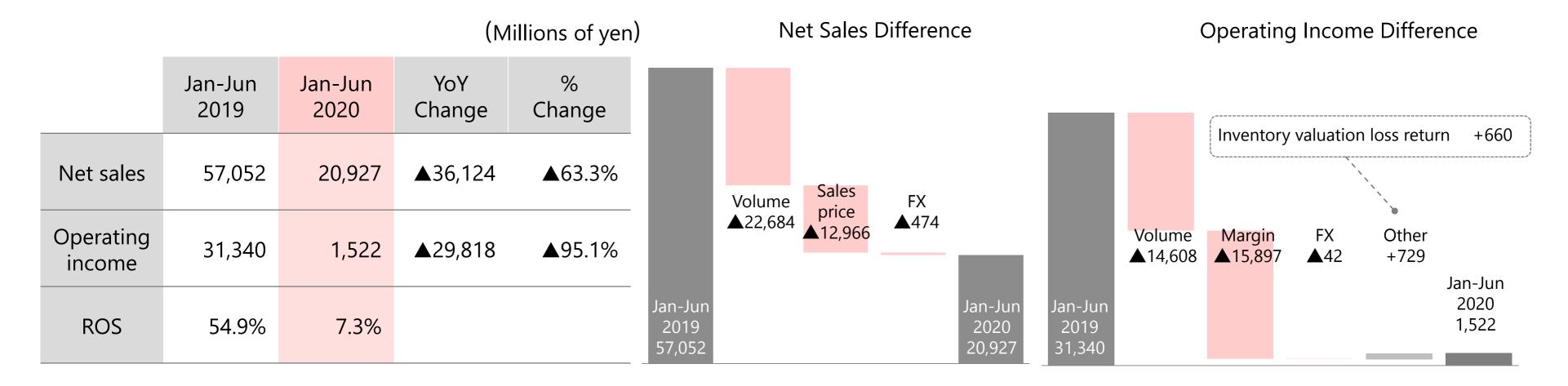
- Net sales and Operating income decreased YoY
- Tokai COBEX business was newly segmented as "Smelting and Lining" (from August 2019)

(Millions of yen)

			Net sales			Operating income	
		Jan-Jun 2019	Jan-Jun 2020	YoY Change	Jan-Jun 2019	Jan-Jun 2020	YoY Change
Graphi	te Electrodes	57,052	20,927	▲36,124	31,340	1,522	▲ 29,818
Car	bon Black	54,595	32,630	▲ 21,964	5,686	▲108	▲ 5,795
Fin	e Carbon	15,960	15,544	▲ 415	3,455	3,484	+28
Smeltir	ng and Lining		12,900	+12,900	▲ 972	▲238	+733
	Il Furnaces and ed Products	5,013	6,390	+1,376	1,348	1,659	+310
	Friction materials	3,916	3,175	▲ 741		_	
Other Operation	Anode materials	2,564	2,097	▲ 467		_	_
Operation	Others	72	71	▲1		_	_
		6,554	5,344	▲ 1,210	199	233	+34
Inter-segme	ent eliminations	_	_	_	▲ 618	▲ 734	▲ 116
	Total	139,176	93,738	▲ 45,438	40,441	5,817	▲ 34,623

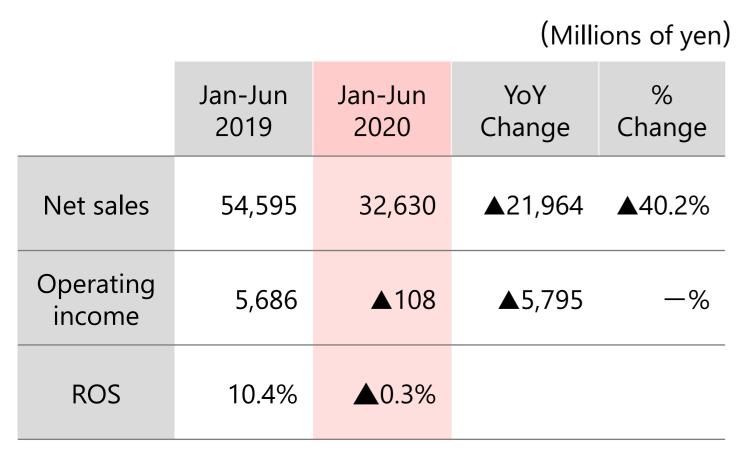
Graphite Electrodes

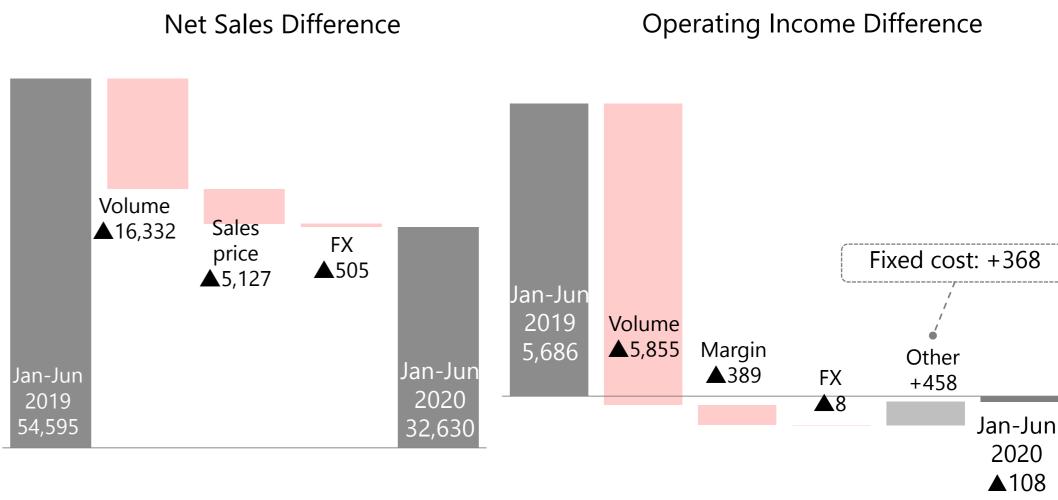
- Graphite electrode demand declined by weak steel demand and inventory adjustment at customer.
 COVID-19 pandemic was an further hit to this condition
- Decline in Sales 63.3%, Operating income 95.1% YoY



Carbon Black

- Auto and tire producers suspended operation one after another from late March. Demand of Carbon black for April to June period was severely depressed. Recorded around 30% drop in volume YoY
- Implemented production cuts corresponding to the collapse in carbon black demand. ROS ▲0.3% (10.4% YoY) due to the sharp increase in cost of sales ratio

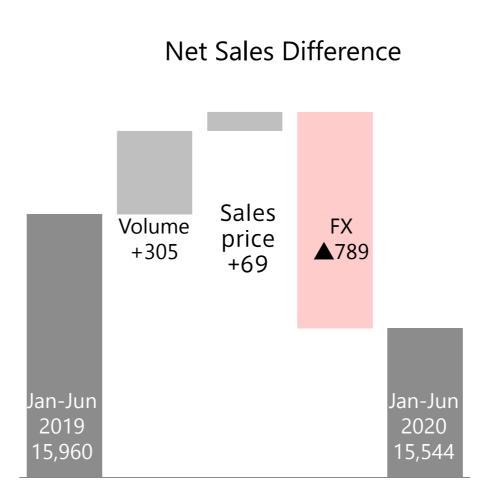


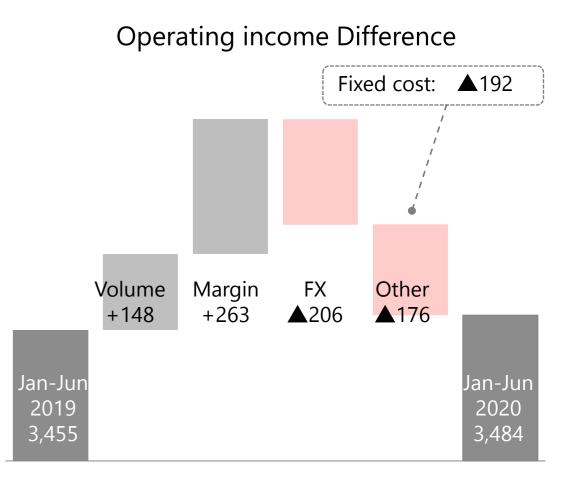


Fine Carbon

- Sales volume for general industry dropped by production/inventory adjustments at customer due to the spread of COVID-19 pandemic
- Robust sales of Semiconductors and PV business
- Results in, 2.6% decline in Net sales, 0.8% increase in Operating income on YoY

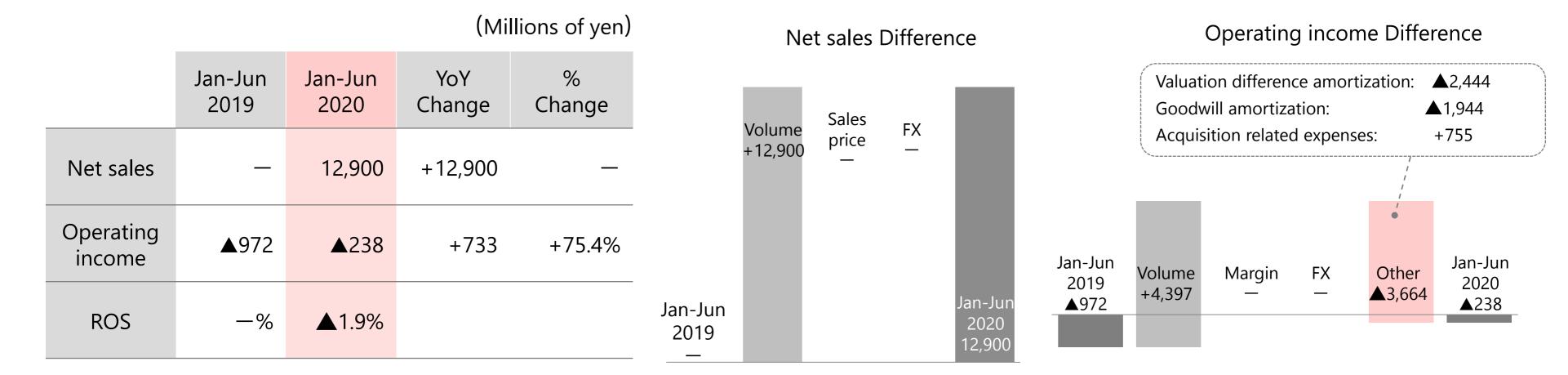
	(Millions of yer							
	Jan-Jun 2019	Jan-Jun 2020	YoY Change	% Change				
Net sales	15,960	15,544	▲ 415	▲ 2.6%				
Operating income	3,455	3,484	+28	+0.8%				
ROS	21.7%	22.4%						





Smelting and Lining

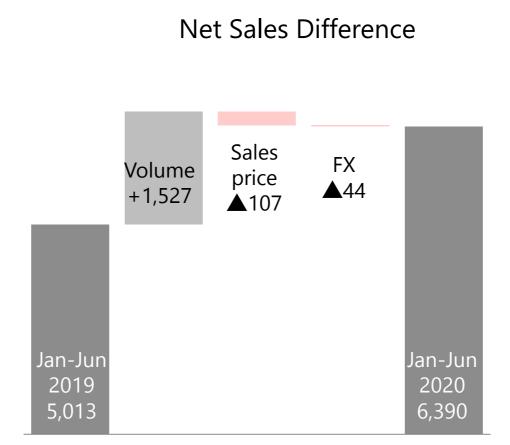
- Tokai COBEX (TCX) consolidated from August 2019
- Q2 Operating income of TCX resulted in ¥4.4b. Contribution to the consolidated operating income although was negative ¥0.2b since in the segment accounting, 2.4b amortization cost of valuation difference arising from the allocation of acquisition cost, ¥1.9 goodwill amortization and ¥0.2b one-off M&A related cost for Carbone Savoie acquired in July 17, 2020, were accounted

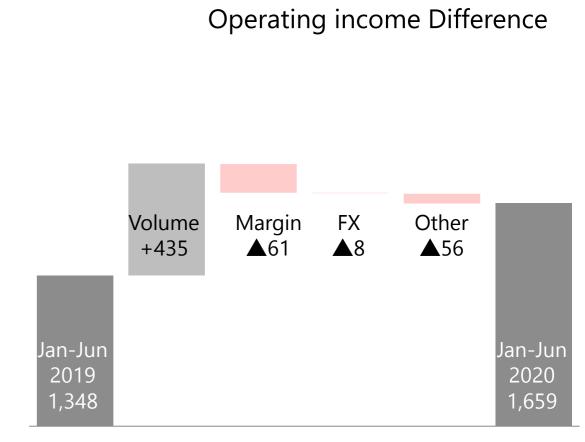


Industrial Furnace and Related Products

- Ceramic heaters: Lower sales YoY. Demand of Electric components industry and in China dropped by the spread of COVID-19 pandemic.
- Industrial furnaces: Higher sales YoY. Robust CAPEX in IT industry and Energy related industry

	(Millions of yen							
	Jan-Jun 2019	Jan-Jun 2020	YoY Change	% Change				
Net sales	5,013	6,390	+1,376	+27.4%				
Operating income	1,348	1,659	+310	+23.0%				
ROS	26.9%	26.0%						





Other Business (Friction Material, LiB Anode Materials)

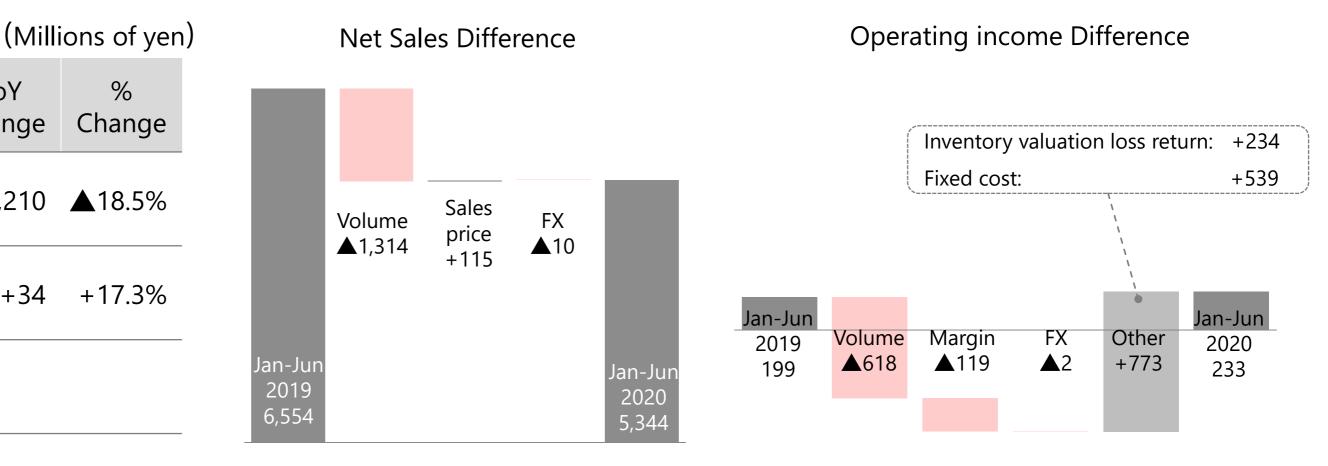
■ Friction materials: Lower sales volume due to the exit from the four-wheel automotive business and spread of the COVID-19 pandemic

Net sales $\pm 3,175$ million ($\triangle 18.9\%$ YoY)

Anode materials: Lower sales volume YoY due to the harsh competition driven by the new entrants

Net sales $\pm 2,097$ million ($\triangle 18.2\%$ YoY)

			(171111)	ions of yen)
	Jan-Mar 2019	Jan-Mar 2020	YoY Change	% Change
Net sales	6,554	5,344	▲ 1,210	▲ 18.5%
Operating income	199	233	+34	+17.3%
ROS	3.0%	4.4%		



Cash Flow

Major Cash Flow items

(Millions of yen)

		Jan-Jun 2019	Jan-Jun 2020	Summary
Cash	flows from operating activities	15,027	25,536	
	Net income (loss) before income taxes	40,295	5,074	
	Depreciation and amortization	6,743	9,998	
	Amortization on goodwill	1,315	3,194	
	Decrease (increase) in trade receivable	433	15,716	
	Decrease (increase) in inventories	▲ 17,840	7,077	
	Increase (decrease) in accounts payable-trade	▲ 2,244	▲ 11,860	Working capital +10,933 (Jan-Jun 2019: ▲19,651)
	Income tax paid	▲ 13,675	▲3,663	
Cash	flows from investing activities	▲ 9,661	▲ 13,532	· Free cash flow:+¥12,003 million (increase +¥6,638 million YoY)
	Purchase of property, pant and equipment	▲ 9,466	▲ 12,063	
Cash	flows from financing activities	▲8,420	9,095	
	Net increase (decrease) in short-term Loans payable	▲ 5,008	▲ 4,944	
	Bond issuance	-	20,000	
	Payment of dividends	▲ 2,557	▲ 5,115	
Cash	and cash equivalents at end of period	37,172	66,630	

[★]Working capital = Trade receivables + Inventories – accounts payable-trade

Major Balance Sheet Items

(Millions of yen)

	December 31, 2019	June 30, 2020	Summary
Total assets	462,872	448,563	
Current assets	196,446	190,957	
Cash and cash equivalents	52,695	74,198	 Cash/monthly sales: 4.7times (End of FY2019:2.4 times) Inventory (▲¥8,262 million from the end of FY2019)
Notes and accounts receivable	50,648	34,146	inventery (=10,202 million file end of 112013)
Inventory	86,380	78,118	
Fixed assets	266,425	257,606	 Tangible fixed assets: (+¥4,752 million from the end of FY2019) Intangible fixed assets: (▲¥101,22 million from the end of FY 2019)
Tangible fixed assets	101,343	106,096	mangiere iixea assets. (\(\begin{align*}
Intangible fixed assets	141,966	131,844	
Investments and other assets	23,115	19,666	
Total liabilities	229,896	228,331	· Interest-bearing debt:¥163,046 million (+15,016 million from End of FY2019)
Current liabilities	117,541	83,396	· Direct-funding ratio:58.3 % (End of FY2019: 43.9%)
Long-term liabilities	112,355	144,934	 Long-term debt ratio: 68.3 % (End of FY2019: 53.8%) Short term credit line:¥62 billion (End of FY2019: ¥40 billion), ¥20 billion executed Liquidation of receivables and CP issuance limit: ¥58 billion (End of FY2019: ¥48 billion), ¥40 billion executed
Total net assets	232,975	220,232	
Shareholder's capital	203,819	200,881	· Capital-to-asset ratio: 44.5% (End of 2019 45.8%) · Adjusted Capital-to-asset ratio*:52,3% (End of 2019: 51.2%)
Other accumulated Comprehensive income	8,019	▲ 1,412	 Net D/E ratio: 0.4 times (End of 2019: 0.5 times) Adjusted Net D/E ratio: 0.2 times (End of 2019: 0.3 times)
Non-controlling interests	21,137	20,764	
Total liabilities and net assets	462,872	448,563	

^{*}Adjusted capital-to-asset ratio is the ratio that takes into account the equity qualifications of rating agencies in hybrid finance

FY2020

Earnings Forecast

Consolidated Earnings Forecast FY2020

- Sales and Operating income steeply declined from Q2 in Graphite electrodes and Carbon black business
- Limited impact of COVID-19 to Fine carbon, Smelting and lining and Industrial furnace business
 (Millions of yen)

	Previous F	orecast (Feb	ruary 12)	Update	ed Forecast for F	YoY	% Change	
	1H	2H	Full Year	1H	2H	Full Year	Change	70 Change
Net sales	120,100	131,100	251,200	93,738	96,262	190,000	▲ 61,200	▲ 24.4%
Operating income	10,500	17,700	28,200	5,817	283	6,100	▲ 22,100	▲ 78.4%
Ordinary income	10,300	17,500	27,800	5,163	▲ 163	5,000	1 22,800	▲ 82.0%
Net Income attributable to owners of the parent company	5,600	11,000	16,600	2,158	▲ 1,158	1,000	▲ 15,600	▲ 94.0%
ROS	8.8%	13.5%	11.3%	6.2%	0.3%	3.2%		
ROIC	<u>—</u>		5.7%			_		
ROE	<u> </u>	_	8.0%	_	<u> </u>	0.5%		<u> </u>

Group companies

Consolidated subsidiaries: 34

■ Equity method affiliates: 2

Average exchange rates:

■ USD1=¥106, EUR1=¥119

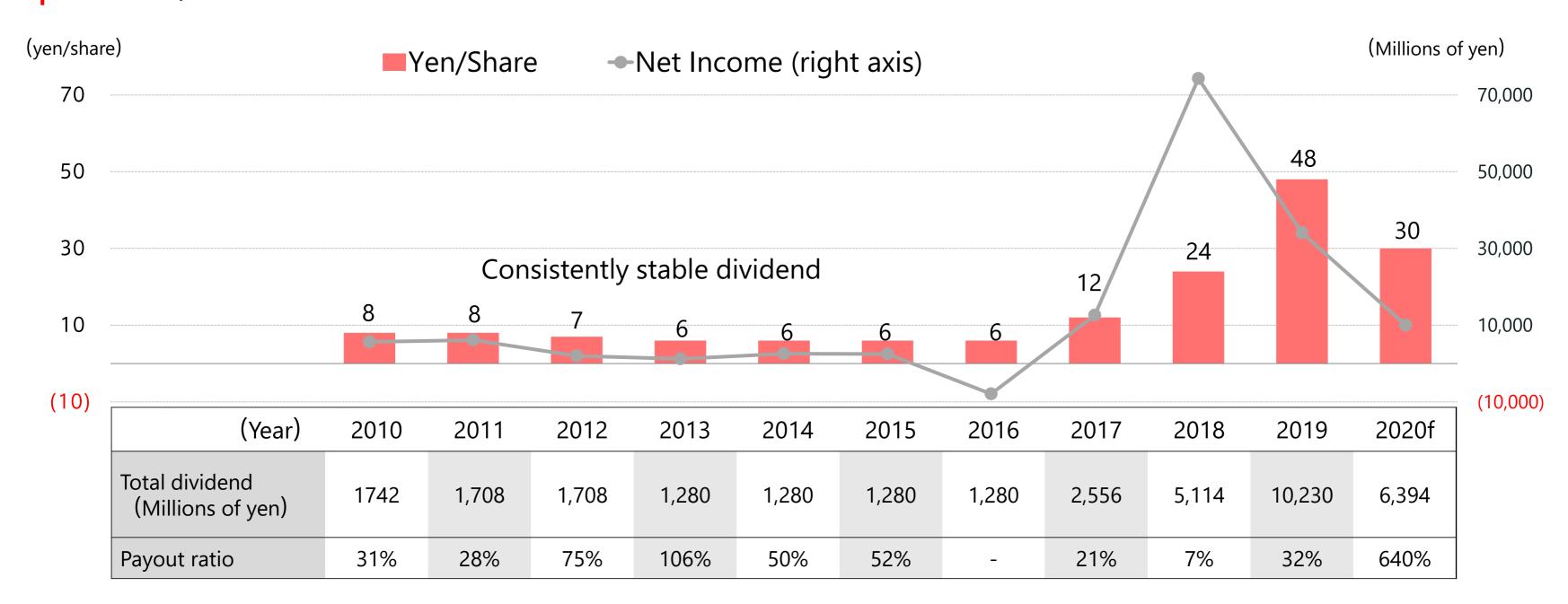
(Millions of yen)

									illions of yell)
		Previous F	orecast (Feb	oruary 12)	Update	ed Forecast for F	Y 2020	VoV Change	0/ Change
		1H	2H	Full year	1H	2H	Full year	YoY Change	% Change
Net Sales		120,100	131,100	251,200	93,738	96,262	190,000	▲ 61,200	▲ 24.4%
Graphite Ele	ectrodes	31,100	34,800	65,900	20,927	16,172	37,100	1 28,800	▲ 43.7%
Carbon Blad	ck	46,900	46,400	93,300	32,630	29,069	61,700	▲ 31,600	▲ 33.9%
Fine Carbor	า	13,700	15,000	28,700	15,544	14,555	30,100	+1,400	+4.9%
Smelting ar	nd Lining	16,000	21,000	37,000	12,900	23,399	36,300	▲ 700	▲ 1.9%
Industrial F Related Pro	urnaces and ducts	7,100	8,500	15,600	6,390	8,310	14,700	▲ 900	▲ 5.8%
	Friction materials	3,900	3,900	7,800	3,175	2,925	6,100	▲ 1,700	▲ 21.8%
Other	Anode materials	1,300	1,400	2,700	2,097	1,803	3,900	+1,200	+44.4%
Operation	Others	100	100	200	71	28	100	▲ 100	▲ 50.0%
	Total Others	5,300	5,400	10,700	5,344	4,756	10,100	▲ 600	▲ 5.6%
Operating Inco	me	10,500	17,700	28,200	5,817	283	6,100	▲ 22,100	▲ 78.4%
Graphite Ele	ectrodes	2,900	5,100	8,000	1,522	▲ 5,222	▲ 3,700	▲ 11,700	▲ 146.3%
Carbon Blad	ck	3,600	4,000	7,600	▲108	309	200	▲ 7,400	▲ 97.4%
Fine Carbor	n	2,200	2,900	5,100	3,484	2,516	6,000	+900	+17.6%
Smelting ar	nd Lining	800	4,000	4,800	▲238	1,939	1,700	▲ 3,100	▲ 64.6%
Industrial F Related Pro	urnaces and ducts	1,600	2,200	3,800	1,659	1,740	3,400	4 00	▲ 10.5%
Others		200	200	400	233	▲ 234	0	4 00	▲ 100.0%
Inter-segmer	nt eliminations	▲800	▲ 700	▲ 1,500	▲ 734	▲ 765	▲ 1,500	0	-

Dividend policy

- Steady dividends on a continued base targeting 30% payout ratio
- FY2020 dividend of ¥30 per share projected (¥15 per share each for mid and year-end dividend)

Dividend per share and Net income



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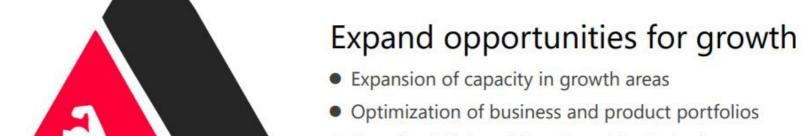
FY2020

Outlook

T-2022 Basic policies unchanged

Strengthen the revenue base

- Generation of stable cash flow in core businesses
- Post-merger integration (PMI) for four acquisition projects (management integration)
- Major renovation of facilities and environmental investment



- Ongoing M&A and investment in strategic areas
- Ongoing initiatives in strengthening technology development

Build a consolidated governance structure

Head office re-organization and review of systems

7

- Expansion of functions of regional headquarters in North America
- Securing and developing human resources
- The basic policies of T-2022 (three years rolling mid-term management plan for 2020 to 2022) has not been changed
- The FY2020 financial forecast has fallen sharply from the initial forecast, and there are many uncertainties about the future outlook, but the quantitative targets for the T-2022 medium-term plan (Sales 300 billion yen, Operating income 54 billion yen) remain unchanged
- We commit to generate the synergies of Tokai COBEX (Germany) and Tokai Carbon Savoie (France) in the newly established "Smelting and Lining" business segment

Outlook for the Graphite Electrode Business

- Demand declined corresponding to the operational cuts in EAF. Still highly uncertain of the 2nd half business negotiation
- Full recovery may not arrive until the end of 2021
- Fundamentals surrounding the business remain unchanged (electrode demand will grow over the medium term)

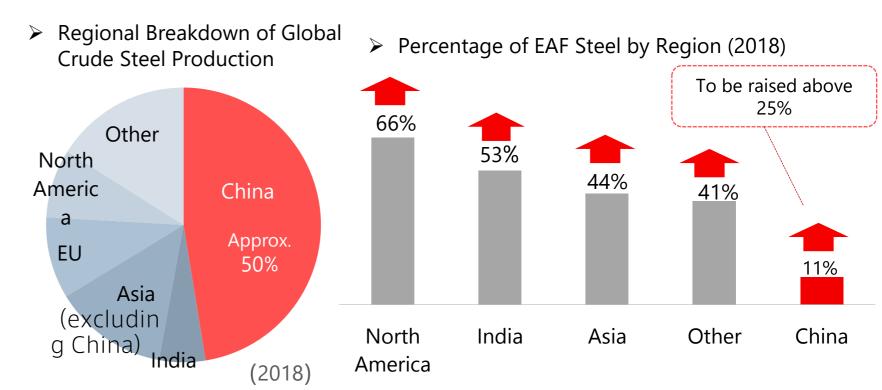
Short-Term Forecast for Steel Material Demand (World Steel Association)

Steel demand may not fully recover until the end of 2021

		Mi	Υ	oY growth		
	2019	2020f	2021f	2019	2020f	2021f
EU(28)	158.1	133.1	147.0	-5.6%	-15.8%	10.4%
Europe (other)	33.8	33.3	36.5	-10.0%	-1.6%	9.7%
CIS	58.8	52.7	56.5	5.6%	-10.3%	7.1%
NAFTA	135.0	108.0	114.7	-4.0%	-20.0%	6.2%
Latin America	42.4	35.1	39.3	-3.6%	-17.3%	12.2%
Africa	36.4	33.0	34.9	0.4%	-9.4%	5.9%
The Middle East	48.7	40.2	45.4	-2.3%	-17.4%	12.9%
Asia and others	1253.3	1218.6	1243.2	6.5%	-2.8%	2.0%
Global total	1766.5	1653.9	1717.4	3.4%	-6.4%	3.8%

Medium- to Long-Term Perspective

Fundamentals surrounding the electrode business remain unchanged



Over the medium to long term, global crude steel production is expected to continue its growth track, while a switch to Electric Arc Furnace (EAF) will be promoted to reduce environmental burden; growth in electrode demand is thus anticipated.

Source: WSA f=forecast

Outlook for the Carbon Black Business

- Demand significantly fell in the short term due to temporary shutdown by automakers and tire manufacturers
- Despite expectations for recovery by the end of 2020, the outlook remains unclear due to risks associated with the resumption of economic activities
- Full-scale demand recovery depends on automobile production and tire consumption trends

Operational Status of Tire Manufacturers

	Jan	Feb	Mar	Apr	May	Jun	Jul-Dec
Asia(China)		Rapid decline		Recovery			
Europe	_		Rapid decline		Moderate Ro	ecovery	
North America	_	_	Rapid decline Moderate Reco			erate Recovery	

Direction of business portfolio

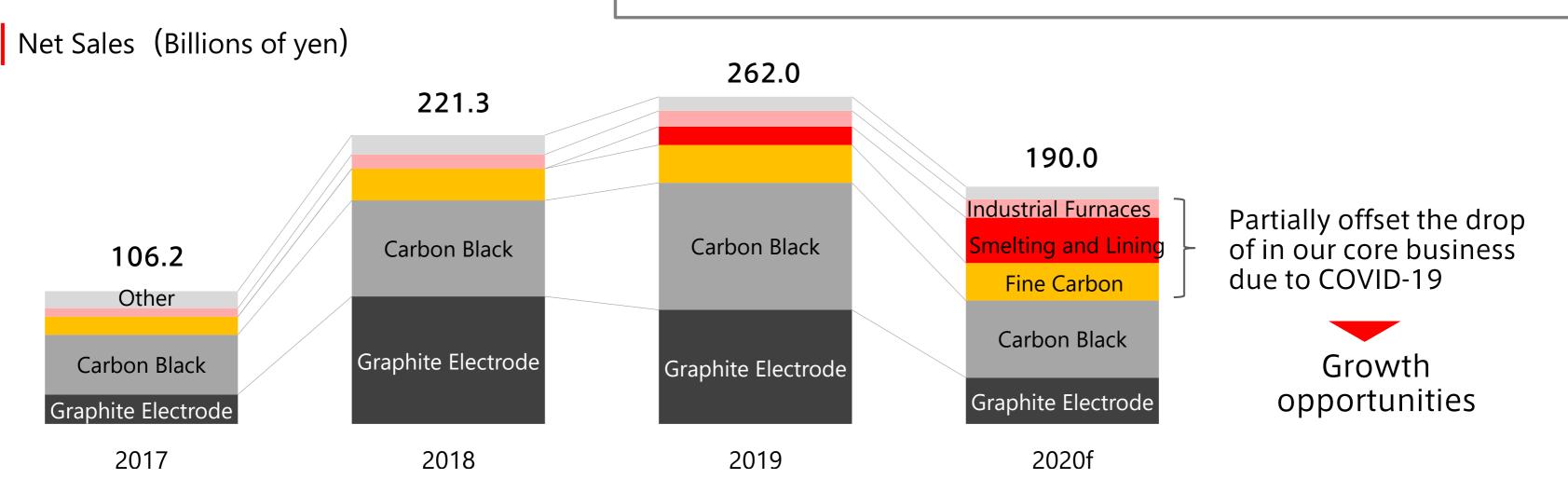
Improve business portfolio dependent on major businesses by expanding into growth markets

Strengthen the Core

- Nov '17 : Acquired US electrode plant
- Sep '18: Carbon black: doubling capacity by acquiring US plant

Enlarge growth business

- Jun '18: Fine Carbon · Contribution of consolidated Tokai Carbon Korea
- Aug '19: Smelting and Lining Entered Cathode business (Tokai COBEX)
- Jun '20 : Smelting and Lining · Acquired Tokai Carbon Savoie



Building a future of Smelting and Lining business

The next largest pillar to Graphite electrode and Carbon black (representing 20%+ of consolidated sales)

Tokai Carbon Savoie

(Acquisition completed July 17, 2020)

Capacity: 37 thousand ton p.a.

Product: Cathodes for aluminum smelter,

Specialty graphite, Anode material (R&D)

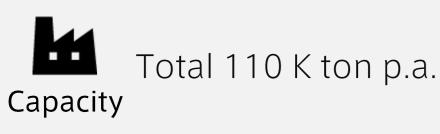
Tokai COBEX

Capacity: 73 thousand ton p.a.

Product: Cathodes for aluminum smelter,

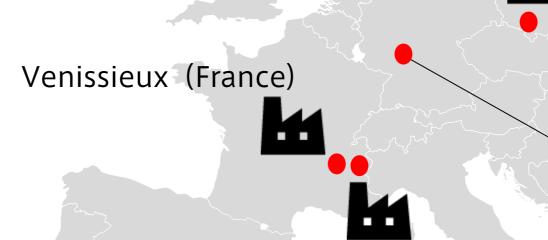
Furnace linings, Carbon electrodes

Raciborz (Poland)









Tokai COBEX Head Office (Germany)

Novy Sacz (Poland)

Tokai Carbon Savoie Head Office (France)
Notre Dame-de-Briancon (France)

Maintenance of a Sound Financial Position

Financial policies to expand and diversify our global business base

Basic Financial Policies

- Secure liquidity to support growth strategies and maintain financial soundness
- We will enhance our management structure, and maintain and improve our credit rating (R&I: A-)

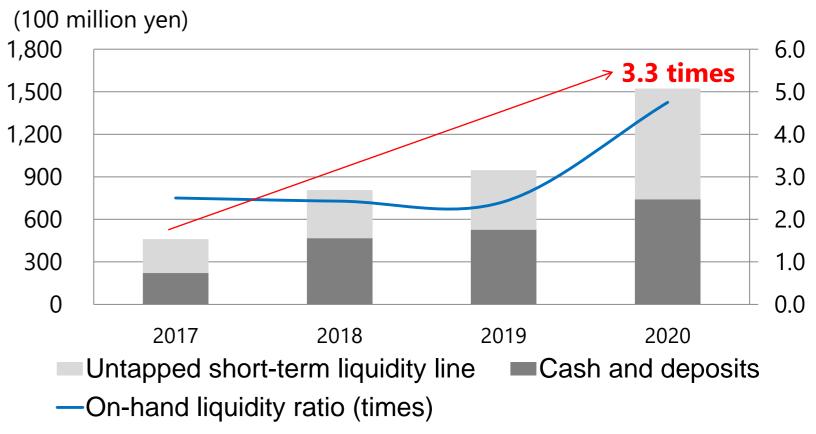
Liquidity on Hand

• Raise the level of liquidity on hand by 3.3 times in 3 years

We will increase the level of liquidity on hand (cash and deposits + short-term liquidity line) to build up resistance against uncertainty. We optimize capital efficiency by managing the cash position of the entire Group through the employment of a global cash management system (GCMS).

	(100 million yen)						
(Reference)	2017/12	2018/12	2019/12	2020/6			
Untapped short-term liquidity line	240	340	420	780			
Cash and deposits	222	468	527	742			
On-hand liquidity ratio (times)	2.5	2.4	2.4	4.7			

- 1. Strengthen the financial base and maintain/improve the credit rating
- Secure long-term, stable financing and maintain access to financial and capital markets
- 3. Maintain liquidity, refinance, and reduce risk
- 4. Optimize global cash management and capital efficiency (Global Cash Management System/in-house banking function)



^{*}On-hand liquidity ratio is calculated by dividing liquidity on hand (cash + deposits) by monthly sales (net sales/consolidated accounting period)

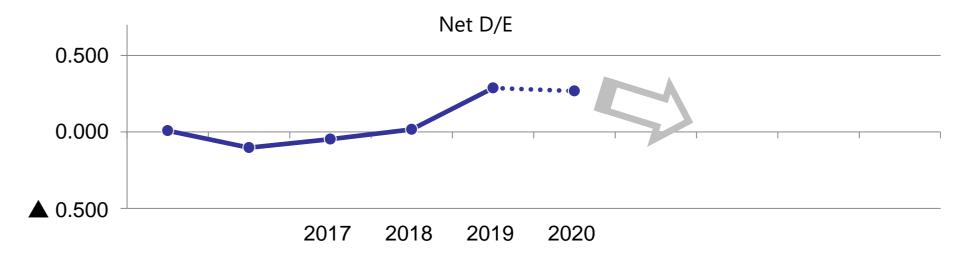
Maintenance and Improvement of Credit Rating and Debt

Executed M&A worth a total of 180 billion yen over four years. Hybrid financing underpinned the credit rating in the A-zone while preventing stock dilution

	Subordinated Bonds No. 1	Subordinated Loan No. 1	Subordinated Bonds No. 2			
Maturity	30NC5	30NC7	30NC10			
Amount raised	25,000	25,000	20,000			
Issue date	2019/12/10	2019/12/27	2020/6/30			
1st call date	2024/12/10	2026/12/27	2030/6/30			
Interest rate (%)	5-year yen swap rate +0.85%	7-year yen swap rate +0.95%	10-year yen swap rate +1.70%			
Step-up	Initial sprea	ad +1.0% after the fire	rst call date			
Optional coupon skips	•	Optional deferral allowed (cumulative) / mandatory payment clause provided / subject to additional interest				
Replacement restrictions clause	Provided in the terms and conditions of the bonds; there are exceptions					
Subordination clause	Subordination					
Issuer rating	A- (R&I)					
Bond rating	BBB (R&I)					
Equity credit	50% (R&I)					

Lower adjusted net D/E ratio from 0.3 times to 0.0 times in four to five years

We will secure liquidity on hand and reduce debt pursuing a net cash position to increase our ability to invest in the future. Our policy is to use a certain amount of operating cash flow to repay borrowings and lower the adjusted net debt-to-equity ratio from 0.3 times to 0.0 times.



(Reference)	(100 million yen)
,	` '

	2017/12	2018/12	2019/12	2020/6
Adjusted net interest-bearing debt	(60)	29	703	538
Adjusted equity	1,264	1,871	2,368	2,345
Adjusted net D/E (times)	(0.047)	0.016	0.297	0.230

^{*}Adjusted net D/E is the debt-to-equity ratio that takes into account the equity credit assigned by rating agencies in hybrid financing.

ESG activities

- Emphasize activities to achieve Sustainability Goals
- Establishing ESG structure to follow globalization of our business

Materiality and Sustainability Goals (excerpts)

Materiality (Themes)	Materiality (Elements)	Fiscal2020 Sustainability Goals				
Harmony with the global environment	Reducing environmental impact	Reducing greenhouse gas emissions	Reduce energy consumption per unit production(cut by 1% or more annually)			
Contributing to society	Technological Innovation	Emphasize research and development	Devote 60% or more of development expenditures to reducing environmental burden			
through our business	Supplying safe and secured products	Further elevate quality	Reduce electrode consumption rate(3% reduction from 2019)			
Strengthenin g our	Strengthening Corporate Governance	Establish a consolidated o	governance system			
management base	Promoting Occupational Safety and Health	Reduce occupational accidents	Reduce frequency rate of occupational accidents(0.98 or lower)			

Listed in the ESG indices (FTSE) in June 2020

These indices are developed by FTSE Russell, a wholly owned subsidiary of London Stock Exchange Group.

Companies that demonstrate strong ESG efforts are selected these indices.



FTSE4Good



FTSE Blossom Japan

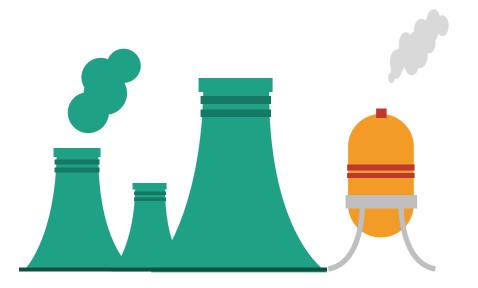
FTSE Russell (the trading name of FTSE International Limited and Frank Russell Company) confirms that Tokai Carbon has been independently assessed according to the FTSE4Good and FTSE Blossom Japan Index criteria, and has satisfied the requirements to become a constituent of the FTSE4Good Index Series and FTSE Blossom Japan Index. Created by the global index provider FTSE Russell, the FTSE4Good Index Series and FTSE Blossom Japan Index are designed to measure the performance of companies demonstrating strong Environmental, Social and Governance (ESG) practices. The FTSE4Good indices and FTSE Blossom Japan Index are used by a wide variety of market participants to create and assess responsible investment funds and other products.FTSE4Good Index Series:

https://www.ftserussell.com/products/indices/FTSE4Good

FTSE Blossom Japan Index: https://www.ftserussell.com/products/indices/blossom-japan

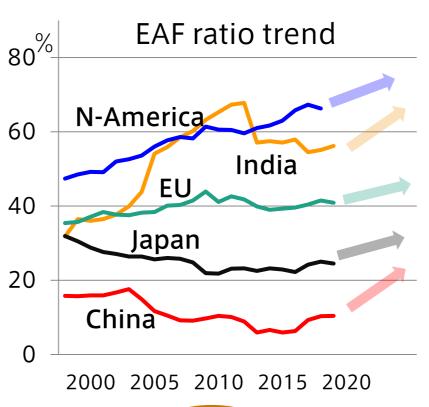
Our continued commitment to sustainability

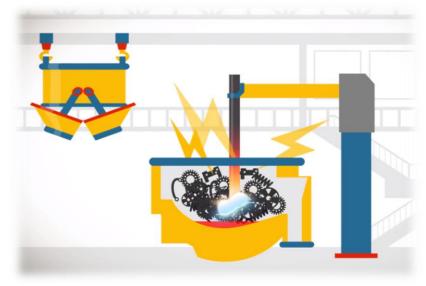
- Responsible production. Prioritizing CPAEX for environment without putting on hold
- Contribute to improve world's energy efficiency through Graphite Electrodes





The Addis Plant, in Louisiana, will also receive new waste-heat recovery equipment. The plant meet all of its electricity needs internally.





The scrap recycling EAF mill will increase worldwide in the light of reducing environmental load and recycle0



Environmental CAPEX initiatives

Three U.S. Carbon black production introduced scrubbers to reduce the environmental load during the production



Realizing recycling society

We contribute to reduce CO_2 emission by stably supplying high quality (lower consumption rate) graphite electrode

Reference Material

Net Sales of Main Subsidiaries

(Millions of yen)

					(IVIIIIO113 OI yell)
Subsidiary	Jan-Jun 2019	Jan-Jun 2020	YoY Change	Location /Business	Summary
Tokai ErftCarbon	18,244	6,871	▲ 11,373	Germany Graphite Electrodes	
Tokai Carbon GE	22,519	7,049	▲ 15,469	U.S. Graphite Electrodes	· Contributing to consolidated results from November 2017
Thai Tokai Carbon Product	9,351	5,034	4 ,317	Thailand Carbon Black	
Tokai Carbon Tianjin	2,342	1,517	▲824	China Carbon Black	
Tokai Carbon CB	24,265	14,173	▲ 10,092	U.S. Carbon Black	· Contributing to consolidated results from September 2018
Cancarb	3,633	3,024	▲ 608	Canada Carbon Black	
Tokai Carbon Korea	8,486	9,669	+1,182	Korea Fine Carbon	· Contributing to consolidated results from June 2018

				f=forec	ast (Millions of yen)
	2016	2017	2018	2019	2020 (f)
Net Sales	88,580	106,252	231,302	262,028	190,000
Operating Income	1,131	11,093	73,065	54,344	6,100
EBITDA	9,627	18,201	85,374	77,053	32,000
Net income Attributable to Owners of the Parent Company	▲ 7,929	12,346	73,393	31,994	1,000
ROS (%)	1.3%	10.4%	31.6%	20.7%	3.2%
ROE (%)	\$\Lambda\$ 6.8%	10.4%	46.8%	16.0%	0.5%
ROIC (%)	0.7%	7.7%	29.6%	13.1%	
Capital Investment	6,013	4,282	11,794	24,341	35,000
Depreciation and Amortization	8,124	6,647	10,390	18,503	20,000
R&D Expenses	2,249	1,482	1,883	2,460	3,000
Interest bearing liabilities	17,048	16,144	49,710	148,030	_
Net D/E ratio	0.0	0.0	0.0	0.5	
Adjusted Net D/E ratio	0.0	0.0	0.0	0.3	_
Number of Employees	1,980	2,142	2,944	3,714	<u>-</u>
Exchange Rate (JPY/USD)	108.85	112.19	110.43	109.05	106.00

 [★] EBITDA = Operation income + Depreciation + Goodwill amortization

Quarterly Segment Results by Segment

									f=forecast	(Millions of yen)
				2019					2020	
		Q1	Q2	Q3	Q4	Full Year	Q1	Q2	2 nd Half	Full Year (f)
Net Sales		68,838	70,338	59,448	63,404	262,028	52,790	40,948	96,262	190,000
Graphite	e Electrodes	27,540	29,511	15,971	18,294	91,317	11,460	9,467	16,172	37,100
Carbon	Black	27,308	27,286	25,763	21,391	101,751	21,030	11,600	29,069	61,700
Fine Car	bon	8,296	7,664	7,286	7,122	30,369	7,825	7,718	14,555	30,100
Smeltin	ng and Lining	_	_	4,511	10,151	14,662	6,652	6,248	23,399	36,300
	al Furnaces and Products	2,212	2,801	3,194	4,432	12,641	3,242	3,147	8,310	14,700
	Friction materials	2,030	1,886	1,857	1,706	7,480	1,639	1,535	2,925	6,100
Other Operat	Anode materials	1,413	1,151	827	269	3,661	903	1,193	1,803	3,900
ions	Anode materials	36	36	36	35	144	35	35	28	100
	Anode materials	3,480	3,073	2,721	2,011	11,286	2,579	2,765	4,756	10,100
Operating	g Income	21,226	19,215	8,980	4,922	54,344	6,750	▲ 932	283	6,100
Operatii	ng Income	15,423	15,917	4,921	3,126	39,388	2,131	▲ 609	▲ 5,222	▲ 3,700
Carbon	Black	3,424	2,262	2,282	542	8,512	1,741	▲ 1,850	309	200
Fine Car	bon	1,905	1,549	1,463	1,188	6,107	1,919	1,564	2,516	6,000
Smeltir	ng and Lining		▲972	▲272	▲356	▲ 1,600	175	▲ 414	1,939	1,700
	al Furnaces and Products	586	762	806	1,072	3,227	868	790	1,740	3,400
Other O	perations	166	33	82	▲ 303	▲ 21	242	A 9	▲ 234	0
Inter-se eliminat		▲ 279	▲339	▲304	▲347	▲1,270	▲330	4 04	▲ 765	▲ 1,500

Disclaimer Regarding Forward-looking Statements

- Forward-looking statements in this document are based on information obtainable at the time this document was published and assumptions as of the date of publication concerning elements of uncertainty that could affect future earnings.
- Actual results may differ substantially, depending on various future factors. Factors that affect business performance include, but are not limited to, economic conditions, trends in product demand and market prices, and fluctuation in exchange rates.
- The quantitative goals, reference values, investment amounts, and other numerical goals in this document only express the medium-term strategy and vision of the company; they are not performance forecasts. The company is not obligated to update such information.
- Please see the disclosures in the Consolidated Financial Results for the official earnings forecast, based on the rules of Tokyo Stock Exchange, Inc.

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