

T-2023

Rolling Mid-Term Management Plan

2021/05/11

Summary of T-2023

Recognition of Current Conditions, Issues, and Direction

- Overall demand in the steel, automotive, semiconductor, and aluminum industries, which are end-users of Tokai Carbon's products, has rebounded and is showing signs of growth. It is important to take advantage of this opportunity to improve the decline in performance in our main businesses since last year and return to a path a growth.
- We have achieved certain results in initiatives aimed at optimizing the business portfolio and will continue to restructure the business portfolio from a long-term perspective amid the tide of carbon neutrality and living with COVID-19.
- Tokai Carbon has invested around 180 billion yen in M&A in total over the past four years. We are proceeding with management integration and have entered the phase of generating synergistic benefits from 2021 onward. We will also strengthen connections between business divisions and put a governance structure into place that will enhance the driving force of the company-wide strategy.

T-2023 Basic Policies

- Returning core businesses to a path of growth
- Optimizing the business portfolio
- Strengthening the consolidated governance structure

Quantitative Targets (FY2023)

- Net sales: ¥320 billion Operating income: ¥57 billion ROS: 18% EBITDA: ¥86 billion

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Position of the T-2023 Rolling Plan

We have adopted a rolling format to respond flexibly to changes in the management environment and will update the Mid-Term Management Plan annually.

	2019	2020	2021	2022	2023	2024
T-2021 Previous plan announcement →	Mid-Term Management Plan 2019-2021					
T-2022 Previous plan announcement →		Mid-Term Management Plan 2020-2022				
T-2023 Current plan announcement →			Mid-Term Management Plan 2021-2023			
Future plan announcement →				Mid-Term Management Plan 2022-2024		



Current Conditions

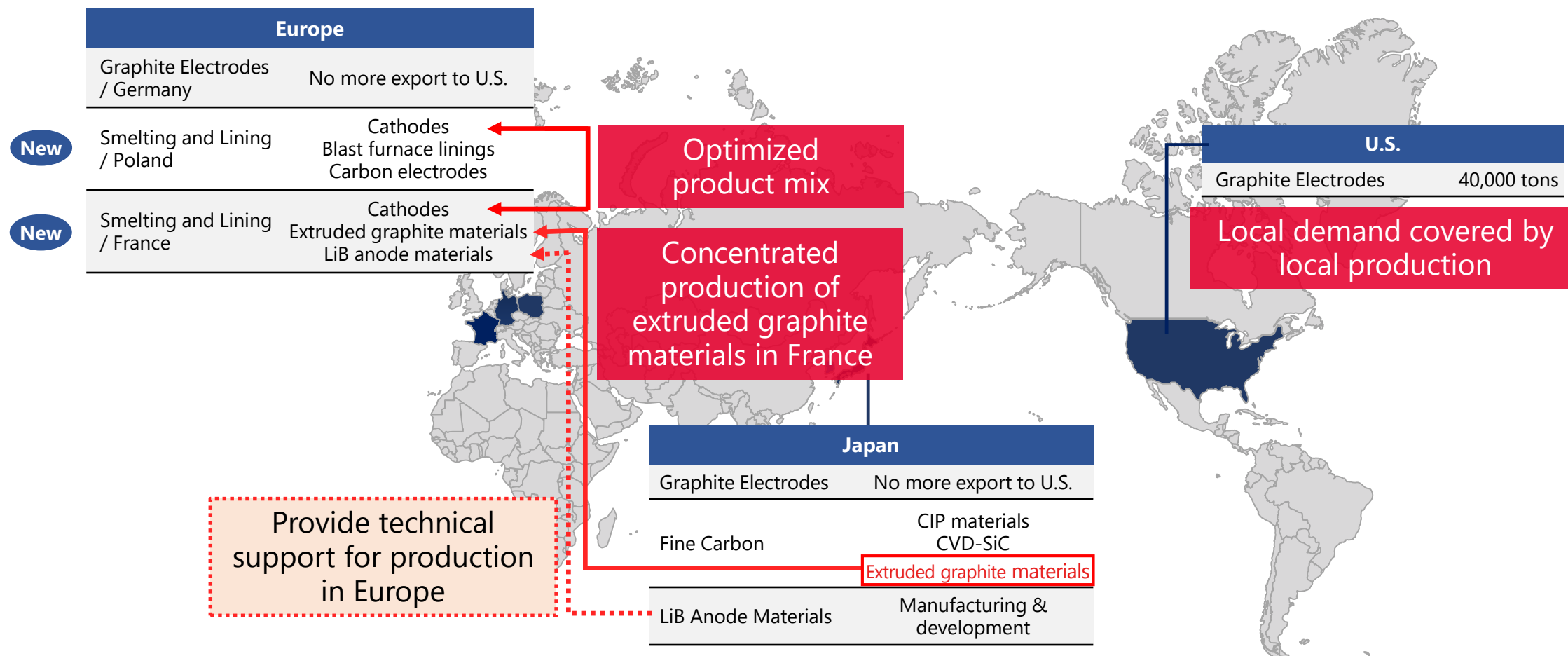
Tokai Carbon's path of transformation

The themes of T-2023 are manifesting the benefits from integrating Group companies and a consolidated governance structure designed to achieve such benefits.



Integration through overall optimization

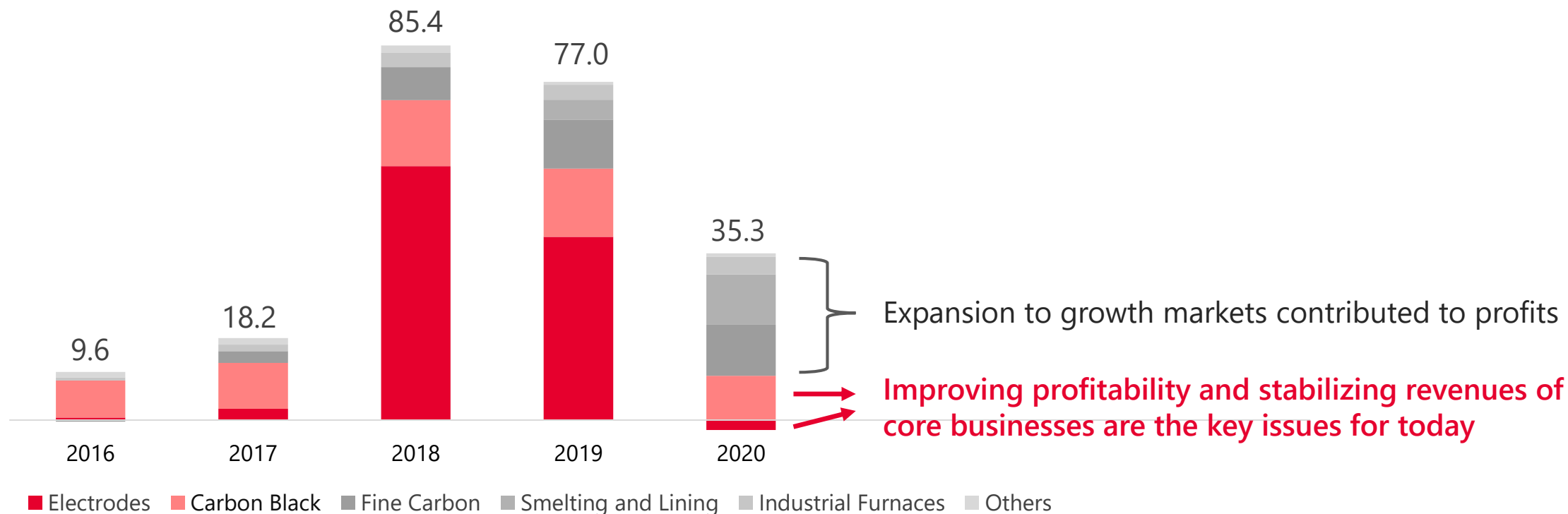
Tokai Carbon supplies various kinds of graphite products from the high temperature production facilities spread around the world. We have been taking steps to achieve overall optimization by considering the production allocation. The benefits of these efforts will gradually become evident from 2021.



Achieving balanced business portfolio

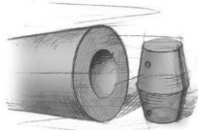
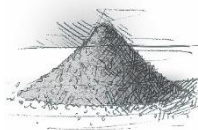
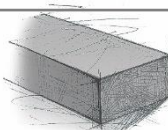

The strategy for balanced business portfolio was achieved by expanding to growth markets. This helped to cover the decline in core businesses, but to recover profitability of our core businesses is the key for company performance.

Trend in EBITDA (Billion yen)



Outlook for the business environment (2021→2023)

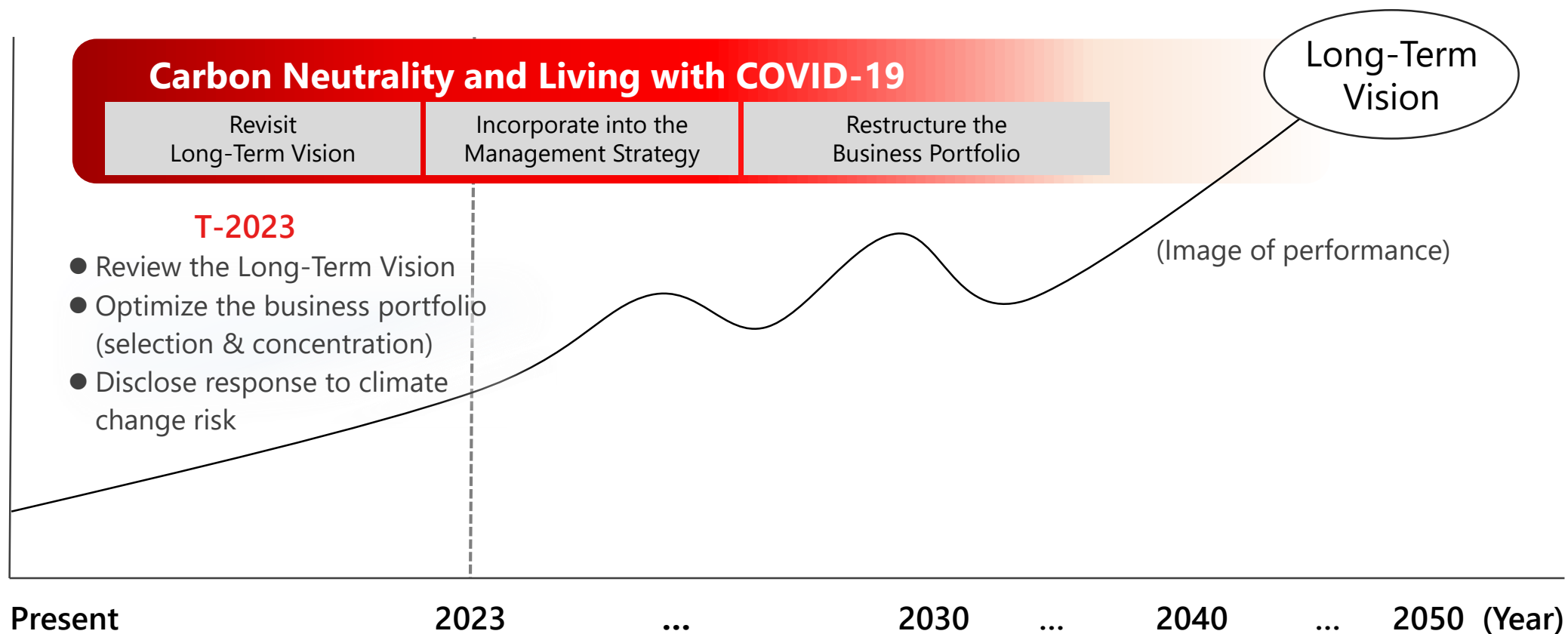
Overall demand has rebounded and is showing signs of growth in the steel, automotive, and aluminum industries, which are end-user industries of Tokai Carbon.

Area	Recognition of the Environment	Related Tokai Carbon Businesses	
Steel production	<ul style="list-style-type: none"> Crude steel production average annual growth forecast at 3% U.S. electric arc furnace (EAF) steel production expected to expand 		Graphite Electrodes
Automotive manufacturing	<ul style="list-style-type: none"> Gradual recovery from 2021 onward Average annual growth estimated at 3-5% 		Carbon Black
Semiconductor	<ul style="list-style-type: none"> Average annual growth forecast at 5-7% 		Fine Carbon
Aluminum	<ul style="list-style-type: none"> Average annual growth forecast at 3-4% Robust market 		Smelting and Lining

Sources: GDP growth rate estimated by Tokai Carbon, based on WSA, Notch, MarkLines, WSTS, Gartner, CRU, and other sources.

Carbon neutrality and living with COVID-19

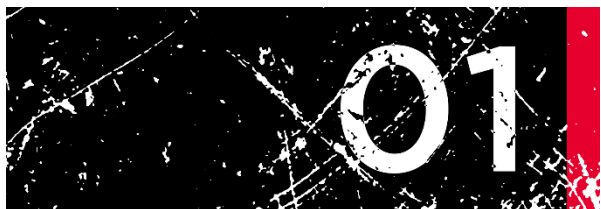
In light of the accelerating trend toward carbon neutrality in addition to the pandemic, we will review our long term vision by redefining Tokai Carbon's strengths and social significance during this T-2023 period.



Initiatives in sustainability

Tokai Carbon will pursue sustainability at the whole company and individual business levels. We view response to carbon neutrality as an especially urgent issue and will implement initiatives that involve the entire supply chain.

Area	Direction	Main Examples	Status
Whole Group	<ul style="list-style-type: none"> Strengthen ESG management base Expand ESG disclosure 	<ul style="list-style-type: none"> Specify and manage materiality and KPI Build a management system for compiling consolidated environmental data Disclose climate change risks based on TCFD Recommendations Implement initiatives in respecting human rights 	<ul style="list-style-type: none"> Continuing to use the PDCA cycle to manage materiality and KPI Preparing a system for compiling consolidated information (during T-2023) Disclosing analysis of climate change risk (2021) Completed due diligence on human rights
Graphite Electrodes	<ul style="list-style-type: none"> Adapt production response to growth in EAF steel Improve productivity through reduction per basic unit of electrodes 	<ul style="list-style-type: none"> Develop new, high-performance electrodes 	<ul style="list-style-type: none"> Achieved 10% improvement in consumption rate in a test using actual user equipment
Carbon Black	<ul style="list-style-type: none"> Recover and reuse waste heat Recycle carbon 	<ul style="list-style-type: none"> Power generation using energy from waste heat Recycle tires and carbon black 	<ul style="list-style-type: none"> Generating power in-house and supplying electricity to the local community Began dialogs with the supply chain
Smelting and Lining	<ul style="list-style-type: none"> Reduce customer emissions per base unit of energy Use renewable energy 	<ul style="list-style-type: none"> Propose RuC® (Ready to Use) cathodes that reduce environmental impact Switch to renewable energy 	<ul style="list-style-type: none"> Achieving good results at customer trials 100% of electricity used in the Polish plant comes from renewable energy
Anode Materials	<ul style="list-style-type: none"> Support development and manufacturing of battery materials that facilitate the proliferation of electric vehicles 	<ul style="list-style-type: none"> Develop high-performance, lower carbon footprint anode materials 	<ul style="list-style-type: none"> European Commission deemed Tokai Carbon eligible to receive subsidies for battery development plan



T-2023 Basic Policies

T-2023 Basic policies

- 1) Return to a growth trajectory in core businesses to stabilize the revenue base
- 2) Engage in a process of selection and concentration of businesses based on carbon neutrality and the pandemic
- 3) Strengthen the consolidated governance structure to respond to rapid progress in globalization

① Returning core businesses to a path of growth

- Manage to increase the operation rate as the market grows
- Improving and stabilizing the profitability of graphite electrodes



② Optimizing the business portfolio (Selection & Concentration)

- Continually revising business composition and product composition
- Increasing production capacity for high value-added products
- Concentrating investment in promising businesses and product development

③ Strengthening the consolidated governance structure

- Responding to globalization of the head office organization
- Using the internal control system to manage subsidiaries
- Building an ESG management base

T-2023 Quantitative targets

We aim to improve the profitability of core businesses and return to a path of growth and successfully optimize the business portfolio by concentrating on growth markets.

¥320 billion

Net Sales

¥57 billion

Operating Income

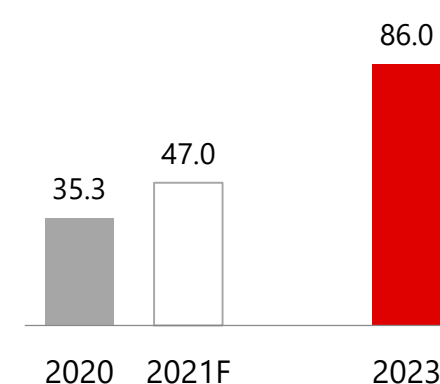
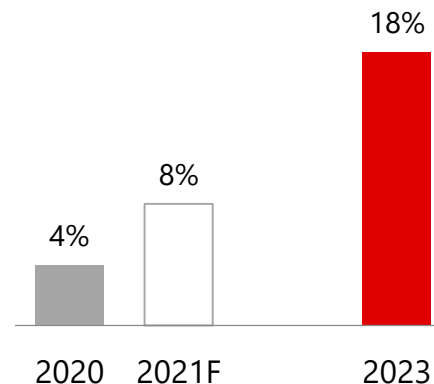
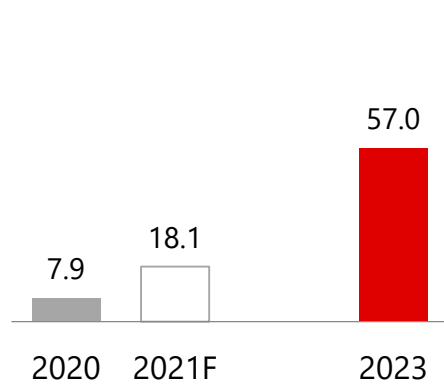
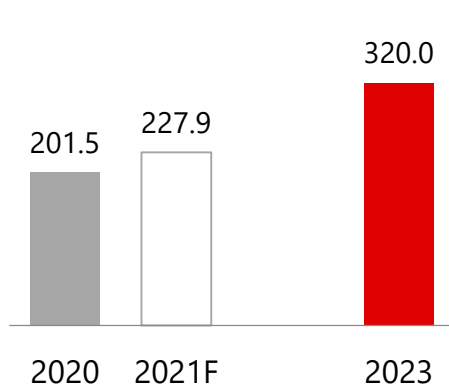
18 %

ROS

Reference: ROIC: 12%; ROE 15%

¥86 billion

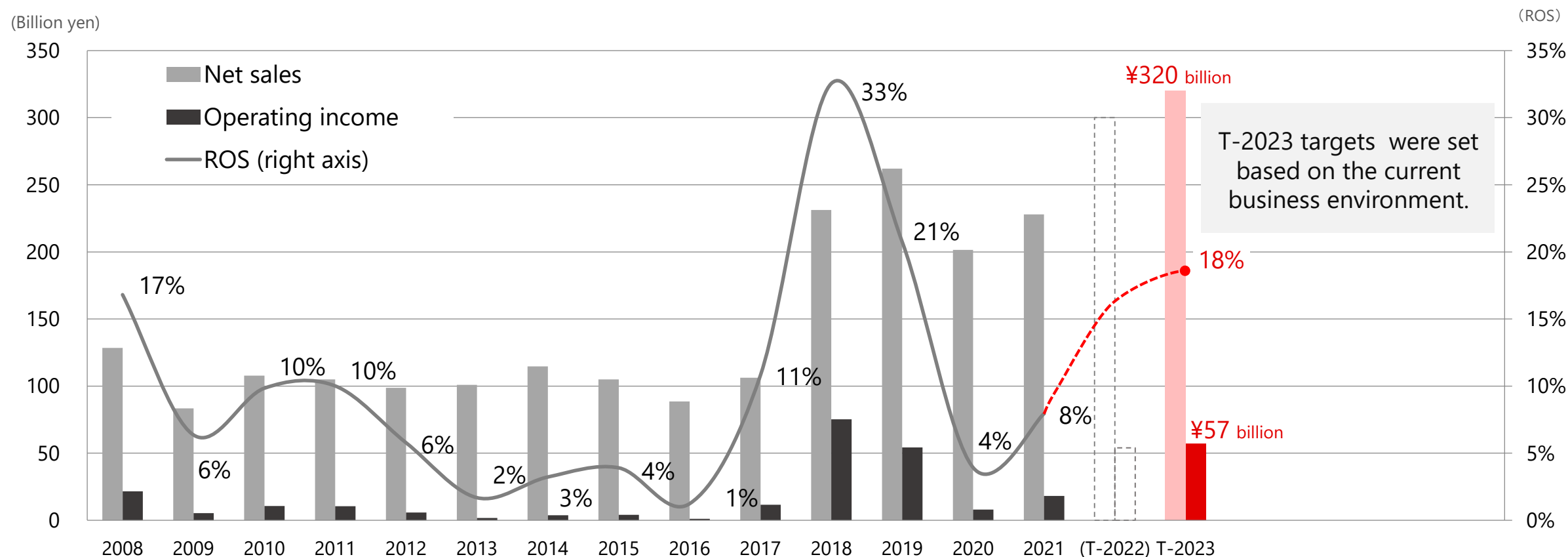
EBITDA



ROS: Return on Sales = Operating income as a percentage of total net sales (operating margin)

(Reference) Comparison to T-2022, the previous plan

The COVID-19 pandemic led to a substantial decline in demand. While an impact on operating performance is unavoidable, we expect demand to rebound in 2021, mainly in our core businesses, and project a return to a path of growth.



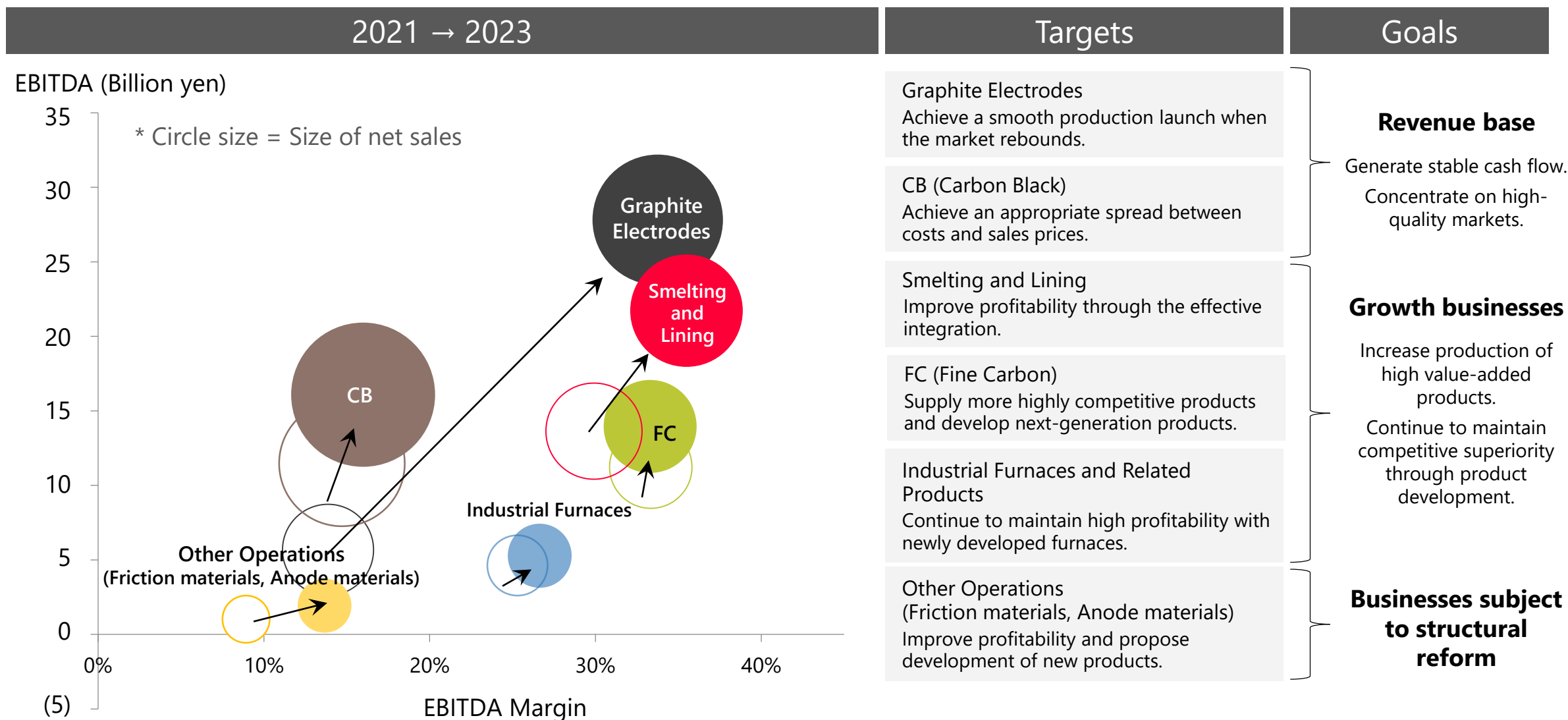
(Reference) Segment data

(100 million yen)

		Results	T-2023	
		2020	2021 (Forecast)	2023 (Reference)
Net Sales		2,015	2,279	3,200
	Graphite Electrodes	379	409	824
	Carbon Black	708	780	1,006
	Fine Carbon	318	337	419
	Smelting and Lining	364	456	612
	Industrial Furnace	139	183	198
Other Operations	Friction materials	65	69	85
	Anode materials	42	43	55
	Other	1	2	1
	Total other	108	114	141
Operating Income		79	181	570
	Graphite Electrodes	▲58	13	233
	Carbon Black	32	54	99
	Fine Carbon	66	57	87
	Smelting and Lining	12	22	101
	Industrial Furnaces	38	44	51
	Other Operations	3	5	14
	Inter-segment eliminations	▲14	▲14	▲15

*Exchange rate assumptions for JPY102/USD, JPY122/EUR

Growth in EBITDA by business segment during T-2023





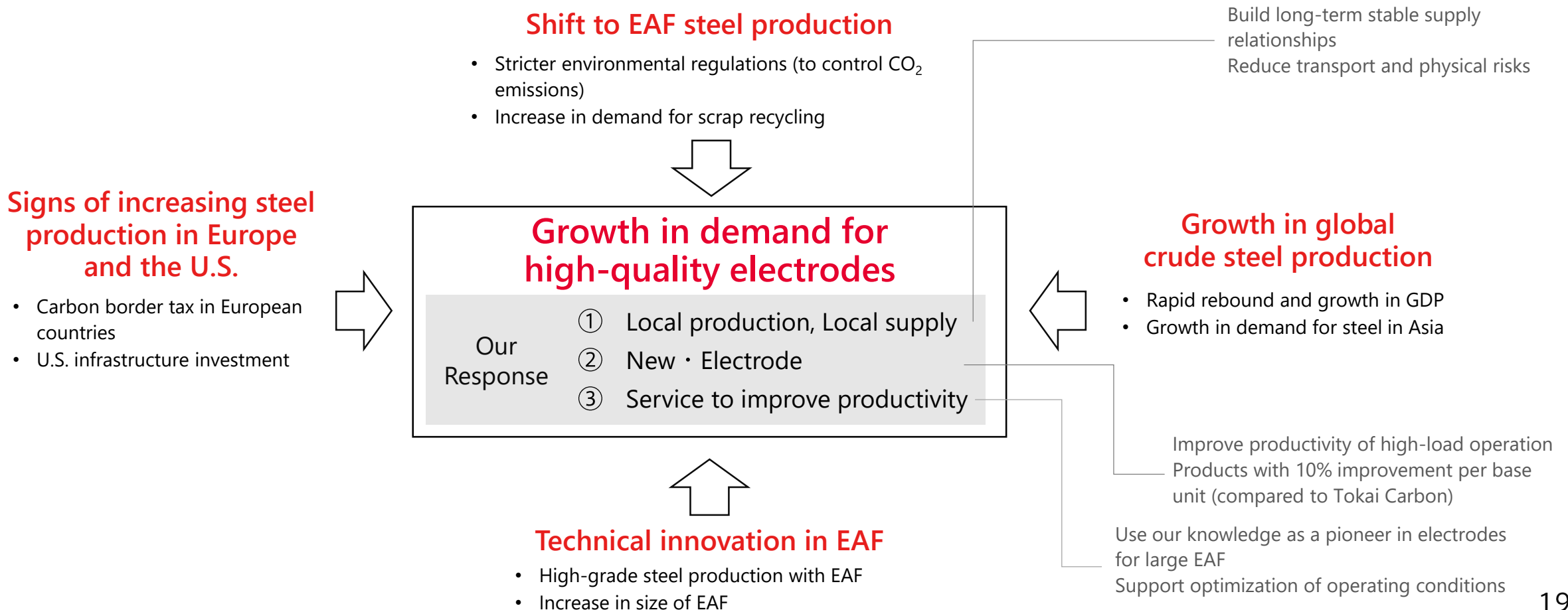
T-2023 Strategy

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Graphite Electrodes

Recover the operating rate as the market recovers and concentrate on high-quality markets

We work to improve profitability and keep pace in production with the current rapid surge in electrode demand. We will concentrate on high-quality markets that will expand over the medium and long term. Stronger support will be provided to users of high-quality products from the three perspectives of supply, quality, and technical service.

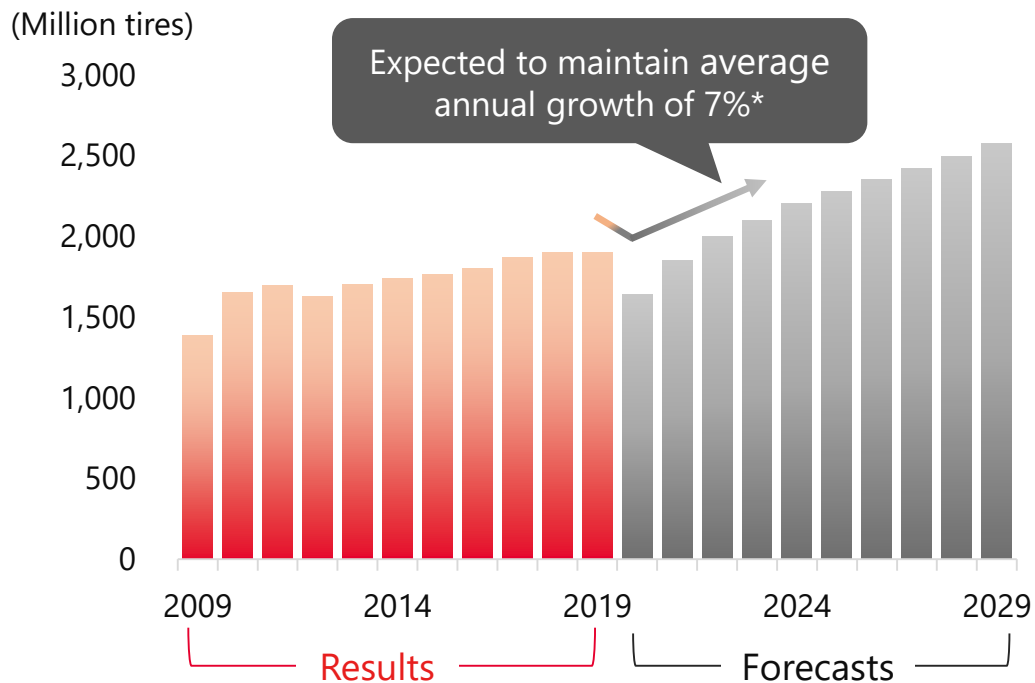


Carbon Black

Respond to market growth and normalize margins

Steady operating rate and margins expected backed by the market growth. The increased costs of installing new environmental facilities should be passed through to the sales price for carbon black.

Global Tire Production



Initiatives During T-2023

- 1. Maintain high operating rates following up the market growth**
- 2. Secure margins**
 - Reflect raw material price fluctuations and equipment investment costs in sales prices
- 3. Increase high value-added products (ongoing effort)**
 - Pursue approval of products developed and increase high value-added products as a percentage of sales
- 4. Implement initiatives aimed at sustainability**
 - Recycle scrapped tires
 - Produce carbon black from plant-based raw materials
 - Research technology for the recovery and reuse of CO₂

Source: Company estimates based on automotive market forecasts and survey firm reports.

* Forecast of 7% growth during T-2023 and 3% to 5% a year from 2024 onward.

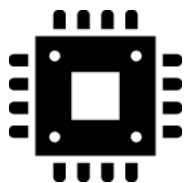
Fine Carbon

Concentrate on markets for high value-added products

We will concentrate on markets for high value-added products by restructuring businesses to achieve overall optimization to strengthen competitive superiority.

Business Environment

Status and Forecast Expansion of the Semiconductor and PV Markets



Semiconductor

Supply shortage for semiconductors. Projected continued growth in the manufacturing equipment market.
(Average annual growth of 5-7%)



Solar power
generation
(PV)

Projected expansion in demand along with the global trend toward switching to renewable energy.
(Average annual growth of 10%)

Strategy

1. Expand scale according to market growth

- Increase production capacity of isotropic graphite materials (by 15%)

2. Concentrate on high value-added products

- Increase production capacity of SiC rings (South Korea: 2H of 2021)
- Introduce state-of-the-art CVC-SiC furnaces (Japan: 1H 2021)
- Install a high-purity furnace (China: 1H 2021)

3. Optimize the portfolio overall

- Consolidate production of extrusion materials in French location
- Make effective use of heat treatment equipment within the Group
- Reduce costs through restructuring of European processing locations

Smelting and Lining

Take advantage of emerging benefits of integration

We expect the benefits of integrating the two acquired companies to result in much stronger sales capabilities and productivity.

2 French plants (ex-Carbone Savoie)

France
Vénissieux Plant



France
Notre Dame-de-Briançon Plant

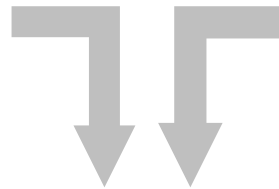


2 Polish plants of Tokai COBEX

Poland
Nowy Sącz Plant



Poland
Racibórz Plant



Integrated in name and reality from 2021

One brand as "TOKAI COBEX"

Sales

- Integration of sales brands
- Improvement in ability to propose solutions
- Consolidation of customer databases

Production Technology Aspects

- Fusion of over 100 years of technical knowledge
- Use of the Six Sigma approach to cost reduction

Management Aspects

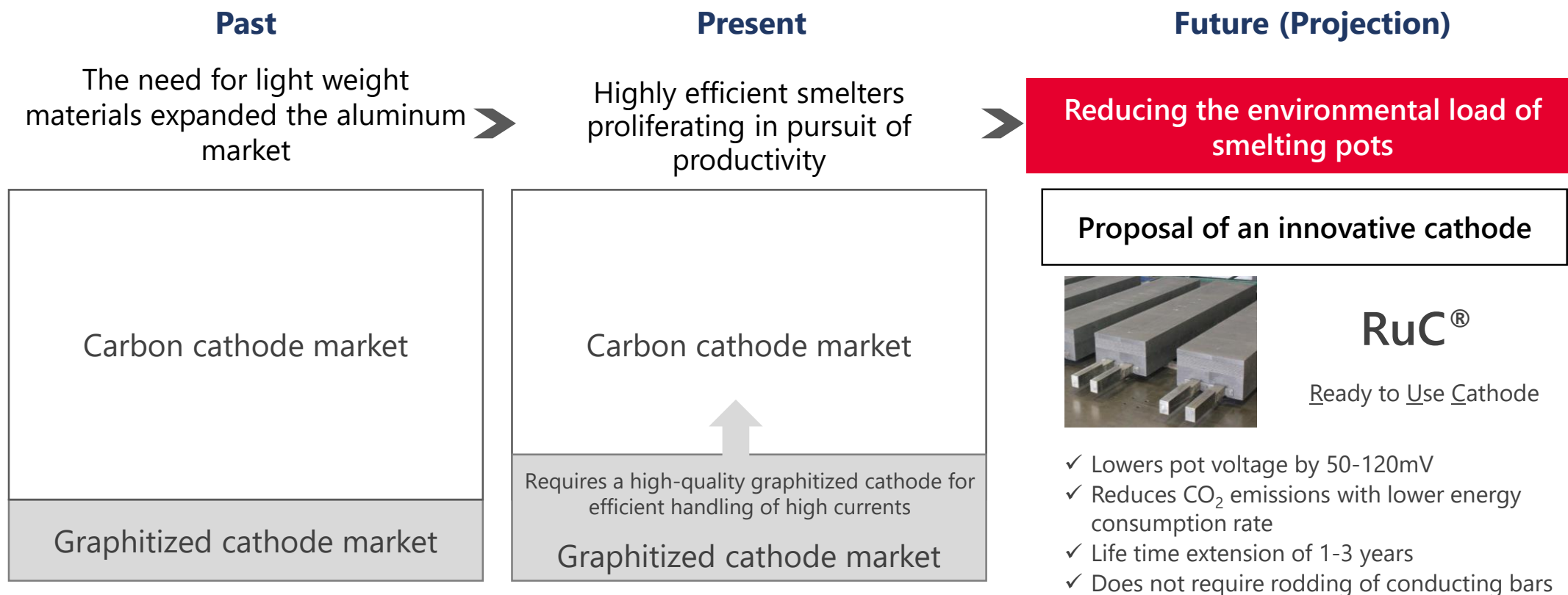
- Use of ERP system integration to create one database for managing production, sales, and accounting (January 2023)

Smelting and Lining

Future customer needs

For achieving higher production efficiency, aluminum smelters are progressively switching to graphite cathodes that can withstand high currents. We are rolling out RuC[®], an innovative cathode with prefixed conducting bars, as a product capable of environmental load reduction.

Changing Needs of Customers (Smelters)



Industrial Furnaces

Develop next-generation furnaces that sustains the stable profitability

We will continue to maintain a formidable position in the MLCC and LiB industry. The key to this is development of next-generation furnaces that anticipate changing customer needs.

Business Environment

Strategy

The forecast for industrial furnaces for the MLCC and LiB markets is strong.



MLCC market

(Average annual growth of 5-10%)

- Strong market will continue due to growth in base station installation for full-scale expansion of 5G.
- The switch to electric vehicles (EV) will accelerate.



LiB market

(Average annual growth of 20-30%)

- Growth in demand for the LiB market is anticipated along with the global trend toward switching to renewable energy.

1. Concentrate on the MLCC and LiB markets, which will continue to grow

- Provide a sustainable supply of high-quality, highly efficient furnaces to the MLCC and LiB markets
- Concentrate on development of industrial furnaces suitable for the needs of next-generation products

2. Achieve differentiation in EREMA (silicon carbide) heating elements and increase production capacity

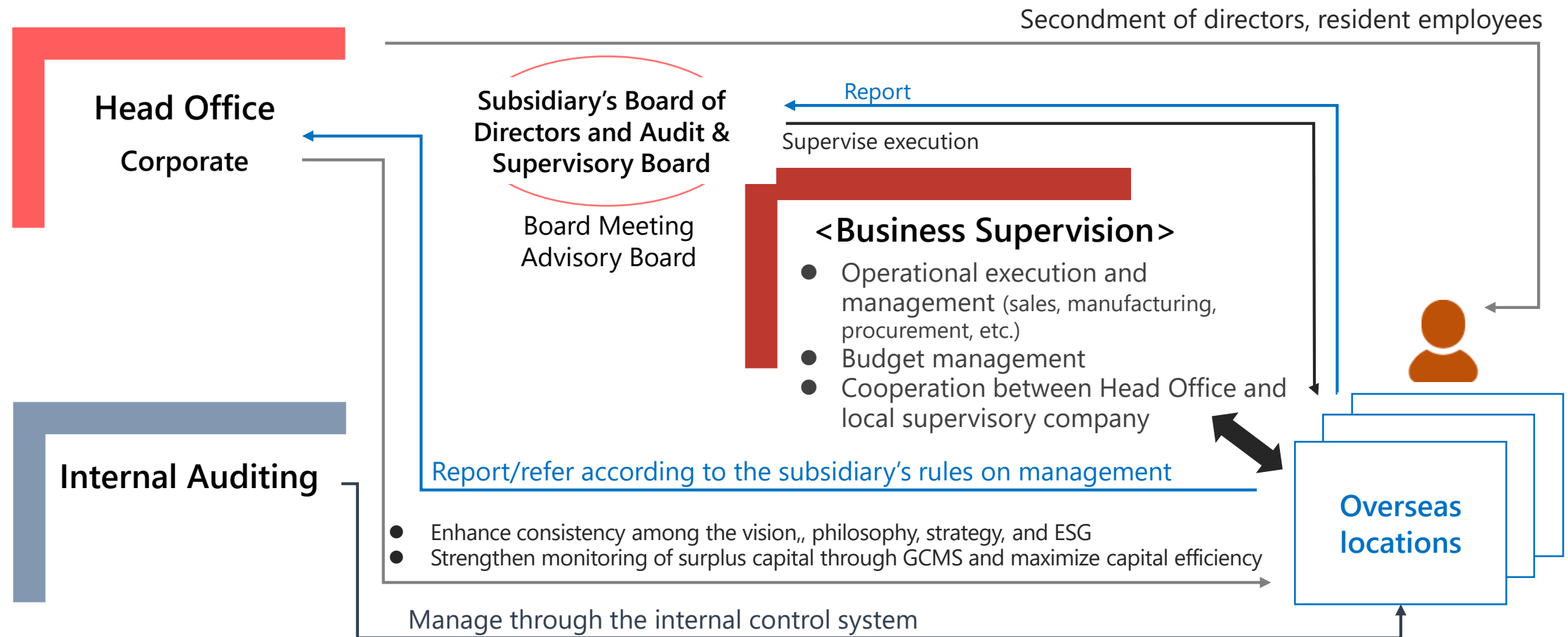
- We will differentiate the consumable EREMA heating elements by providing an eco type product and increase Group production capacity

3. Take action on sustainability

- Develop new furnaces that reduce environmental impact for installation in energy-efficient systems
- Develop energy-efficient, environmentally friendly EREMA heating elements

Strengthening the consolidated governance structure

We will each strengthen the governance structure for overseas subsidiaries in various ways from the perspectives of the management, supervisory, and internal auditing functions.



*GCMS: Global Cash Management System (a system that optimizes overall management of finances and funds in the global corporate group)



Capital Allocation

Allocation of operating cash flow

Our basic policy is to provide the funds needed for investment in growth through operating cash flow generated from our businesses and cash on hand.

Operating Cash Flow

2021 - 2023

¥150 billion

3-year cumulative total



Facility
investment

¥66 billion

- Facility renewal
- Overall optimization (Improve throughput)
- Addition of capacity
- Environmental investment

Debt reduction

¥37 billion

Reduction in debt to increase the ability to invest in the future

Strategic investments
(M&A and alliances)

Continuing policy of M&A in the automotive and electronics sectors to capture future growth opportunities

Shareholder return

Stable, consistent dividends
Agile purchase of treasury shares

Source of Future Value

(Reference) Main types of facility investment

	Investment 3-year cumulative total	Business	Rough Estimate (Billion yen)	2021	2022	2023
Facility renovation Regular maintenance	¥29 billion	Graphite Electrodes	8	Investment in renewal (Improvement in productivity)		
		Carbon Black	7	Investment in renewal (Improvement in productivity)		
		Fine Carbon	9	Major repairs		
		Smelting and Lining	5	Improvement in productivity		
Overall optimization	¥10 billion	Graphite Electrodes	7	Building the optimal group production structure		
		Smelting and Lining	3	Resolve bottlenecks		
Capacity increase	¥6 billion	Fine Carbon	5	Increase capacity for materials, CVD-SiC furnaces, and high purity furnaces		
		Industrial Furnaces	1	Increase capacity		
Environmental investment	¥16 billion	Graphite Electrodes	2	Ongoing investment in reducing environment impact		
		Carbon Black	10	North America and EPA response		
		Fine Carbon	2	South Korea and others		
		Smelting and Lining	2	Installation of exhaust gas equipment, etc.		
Others	¥5 billion	-	5	Development. Software, etc.		
Total	¥66 billion			¥25 billion	¥24 billion	¥17 billion

Note: These investment plans do not include the facility investment plans for expansion of anode materials in Europe.

Debt reduction

Secure liquidity to support the growth strategy and maintain financial soundness.

2017~2020

Executed M&A worth a total of 180 billion yen over for years

(100 million yen)

	2016	2017	2018	2019	2020
Operating CF	175	105	441	416	550
Investment CF	▲36	▲140	▲538	▲991	▲443
Financial CF	▲76	▲45	296	645	9
Cash at end of period	285	221	411	464	577

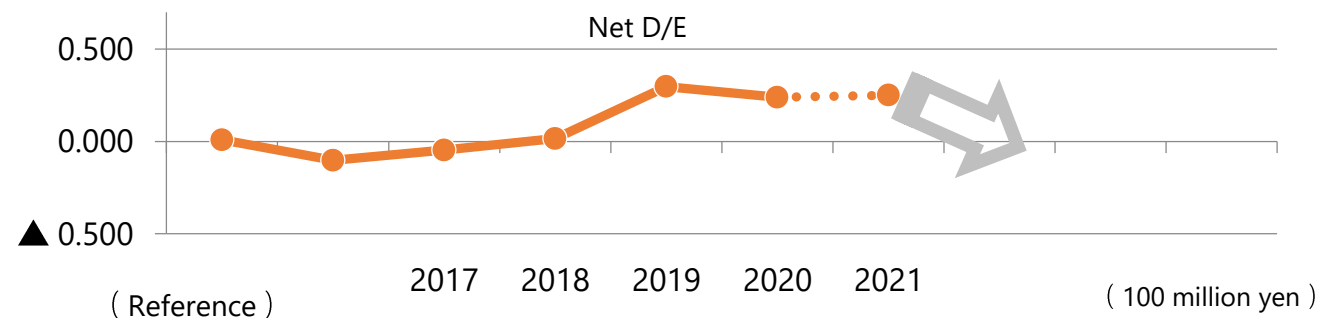
- 2017: U.S. plant for graphite electrodes acquired
- 2018: Tokai Carbon Korea acquired as a consolidated subsidiary
- 2018: U.S. plant for carbon black acquired
- 2019: COBEX of Germany (now Tokai COBEX) acquired
- 2020: Tokai COBEX Savoie of France acquired

- Subordinated financing of 50 billion yen for the acquisition Tokai COBEX.
- Subordinated financing of 20 billion yen for the acquisition of Tokai COBEX Savoie

Future Policy

Lower adjusted net D/E ratio from 0.2 times to 0.0 times in about three years

We will work to reduce debt to secure a sound liquidity pursuing net cash basis to redeem subordinated bond. Our policy is to increase our ability to invest by generating cash flow through sustainable profit growth, improving capital efficiency, and strengthening financial governance.



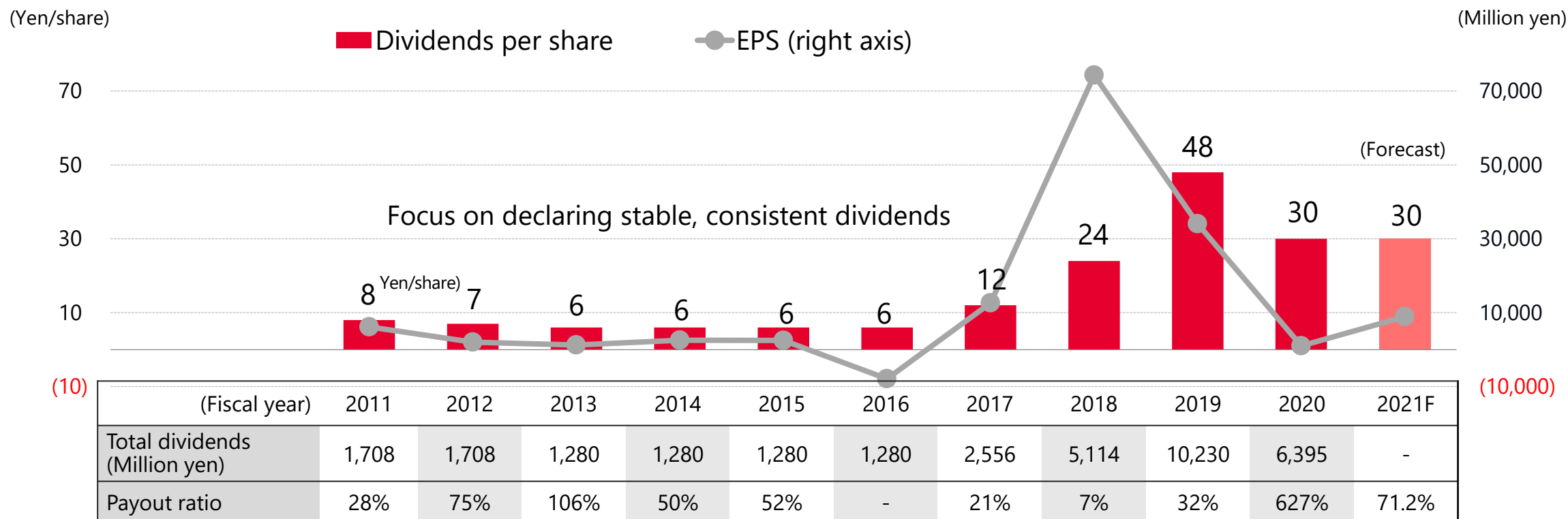
	2017	2018	2019	2020
Adjusted net interest bearing debt	▲60	29	703	565
Adjusted equity	1,264	1,871	2,368	2,363
Adjusted net D/E (times)	▲0.047	0.016	0.297	0.239

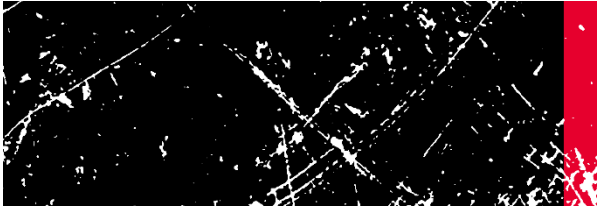
*Adjusted net debt/equity is the debt/equity ratio used by the rating agencies that rate hybrid financing to confirm capital

Shareholder return

Tokai Carbon will focus on declaring stable, consistent dividends while setting the target dividend payout ratio of 30%. We will also consider using surplus cash flow to buy back the company's shares as dictated by collective consideration of the business environment, financial status, investment in growth, and the level of the stock price.

Dividends Per Share and Net Income





Conclusion

Conclusion

Company Issue





- There has been a delay in recovery from COVID-19 in core businesses.
- We are optimizing our business portfolio following the five M&A deals as we take the trend toward carbon neutrality into consideration.
- The global organization has expanded rapidly (70% of net sales and employees are overseas).

Business Environment

Overall demand has rebounded and is showing signs of growth in the steel, automotive, semiconductor, and aluminum industries, which are end-user industries of Tokai Carbon.

Outlook for the business environment (2021→2023)

Overall demand has rebounded and is showing signs of growth in the steel, automotive, and aluminum industries, which are end-user industries of Tokai Carbon.

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Semiconductor	<ul style="list-style-type: none"> Average annual growth forecast at 5-7% 	 Fine Carbon
Aluminum	<ul style="list-style-type: none"> Average annual growth of 3-4% forecast to continue Firm market 	 Smelting and Lining

Sources: GDP growth rates estimated by Tokai Carbon based on IEA, NIPA, Nishin, Macroeconomic, MOTT, Statista, CRU and other sources.

9

(Slide 9)

T-2023 Basic Policies

- ① Returning core businesses to a path of growth
- ② Optimizing the business portfolio
- ③ Strengthening the consolidated governance structure

T-2023 Key Factors

- Improving profitability of graphite electrodes and carbon black, our core businesses
- Facility investment in the fine carbon, smelting and lining, and industrial furnaces businesses, which are growth areas, and concentration on high value-added products
- Strengthening subsidiary management functions from the three aspects of the head office corporate function, the business supervision function, and the internal auditing function

T-2023 Targets

Net sales:	¥320 billion
Operating income:	¥57 billion
ROS:	18%
EBITDA:	¥86 billion

Materials that spread joy

Carbon is an essential material for all sorts of industries. It continues to contribute to our daily safety and comfort, pursuit of a recycling-oriented society, energy efficiency and reduction in CO2 emissions, development of advanced technology that will carve a path to the future, and in many other ways.

We will continue to supply materials that bring happiness worldwide through technology and innovation

T-2023 Basic Policies

1. Returning core businesses to a path of growth
2. Optimizing the business portfolio
3. Strengthening the consolidated governance structure

"Carbon Neutrality" Project Team

- This project launched on May 1, 2021, with the president as the project leader
- The Tokai Carbon Group will pursue cross-organizational initiatives to reduce green gas emission in order to realize a carbon neutral society



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.

T-2023