

The background is a dark, textured surface. It features several circular and rectangular areas with intricate white geometric patterns, including interlocking circles, a complex star-like mandala, and a square with concentric diamond shapes. A large, diagonal, textured gold leaf-like shape is prominent on the right side, with smaller gold leaf pieces scattered around it.

# Integrated Report 2025



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### Editorial Policy

We view the integrated report as a media to encourage a constructive dialogue with all stakeholders. This report was made to provide a comprehensive and easy-to-understand story of how our value creation journey relates to the current business platform and where are we heading for, along with current issues and measures. In this report, we also displayed how our core values, long-term vision, materiality and strengths are incorporated into our management strategy.

### <Outlook Disclaimer>

This report contains statements such as plans and management strategies concerning future business performance outlook. They are based on our assumptions and forecasts derived from information currently available. In the future, the results of outlook may differ significantly due to factors such as changes in social and economic conditions. The Company assumes no obligation to update information regarding changes in its outlook.



# TOKAI CARBON at a glance

We are a materials manufacturer with over a century of experience, empowering industries globally by delivering graphite and other carbon materials to all industries and expanding the possibilities of numerous products. We are committed to enriching the world through advanced materials and solutions.

Performance in 2024 (Consolidated)

## Year established



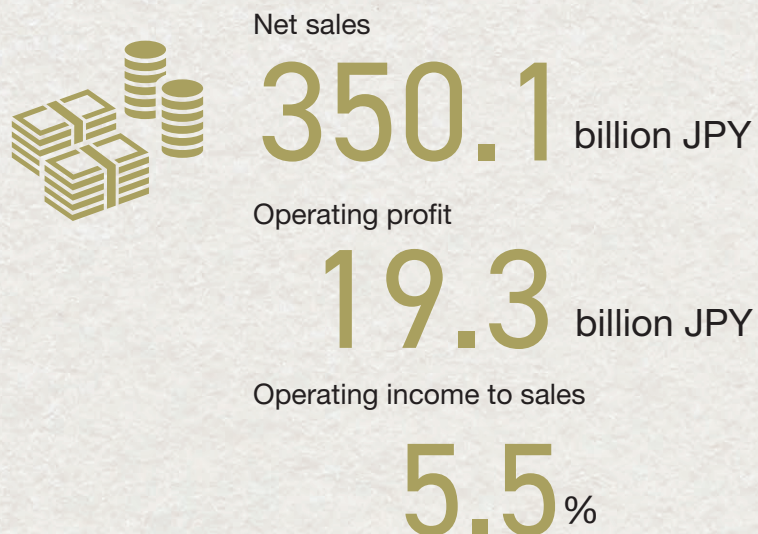
## Number of employees



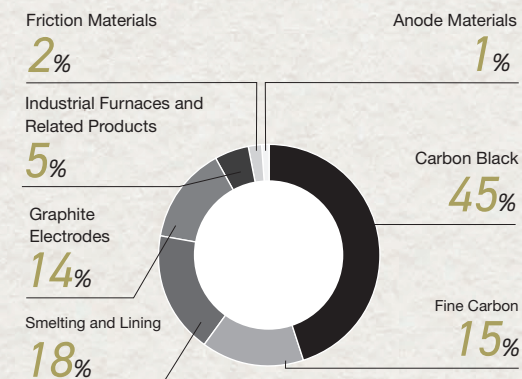
## Total assets



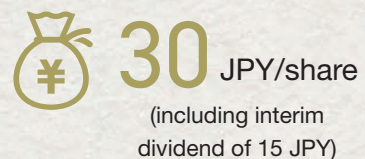
## Earnings Results



## Sales ratio by segment



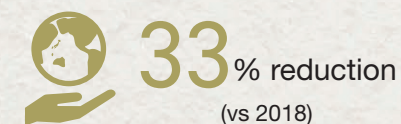
## Dividend per share



## Overseas sales ratio



## CO<sub>2</sub> reduction rate





## Top Message

# Executing fundamental structural reform to realize Vision 2030

In Vision 2030, we envisioned the ideal form of the Company in 2030. We will first undertake rapid business restructuring and lead Tokai Carbon to future growth.

**Hajime Nagasaka** President and CEO





# Responding to a drastically changing market environment

Viewing the fiscal year ended December 2024 as a year for starting anew, our Group addressed the facing challenges one by one, amid a drastically changing business environment. Despite acceptable results in the Carbon Black and the Fine Carbon businesses, due to substantial losses in the Graphite Electrodes and the Smelting and Lining segments - areas requiring urgent structural reform, as extension of conventional approaches offer no clear path to recovery - the fiscal year was an extremely challenging one overall, recording a net loss of 56.7 billion JPY.

In the Carbon Black business, we have achieved stable operations as a series of environmental investments came to fruition at our U.S. subsidiary acquired in 2018. While these environmental investments exceeded initial projections, the subsidiary, which boasts the top share in the U.S. market, has contributed significantly to the profits of Carbon Black business. In addition, a plant relocation project at our subsidiary in Thailand has progressed according to plan.

In the Fine Carbon business, during the year we undertook an expansion of production capacity for isotropic graphite material, used for semiconductor manufacturing and other applications. We also

expanded the business's domain by concluding a strategic partnership with France-based Soitec concerning the supply of the polycrystalline SiC substrates which serve as supporting platform for power semiconductors. However, the current business environment is by no means a positive one. Our business in the memory semiconductor domain in South Korea, once a driver of the division, remains sluggish. Our power semiconductor-related business had made up for this sluggishness, but it's now being impacted by the slowdown in the EV market.

We've embarked on a drastic rationalization of our Graphite Electrodes business. This includes the decision to close one of our two domestic plants in Japan by July 2025. For our German subsidiary, where we announced a 30% production capacity reduction in the summer of 2024, we felt a more decisive step was necessary given the ongoing European economic stagnation. Consequently, in May 2025, we announced its transfer to a German investment fund. I personally feel we've reached a significant milestone in the structural reform of our Graphite Electrodes business.

Our Smelting and Lining business, headquartered in Germany with two plants each in Poland and

France, still has significant ground to cover in its structural reform. While this business followed the growth trajectory I envisioned until 2023, unforeseen environmental shifts - including the escalating Russia-Ukraine situation, the rise of Chinese competitors, and the weakening JPY - have substantially eroded its price competitiveness, something we didn't anticipate at the time of the acquisition. We've repeatedly requested improved reform proposals from our local teams, but so far they are not satisfactory, leading us to ask for further re-evaluation. While we typically respect the autonomy of our overseas subsidiaries, I acknowledge that it was a mistake not to dispatch head office personnel to such substantial business operation. Looking ahead, a bold structural overhaul is indispensable. This may involve re-evaluating the local management structure, consolidating and reducing product lines, and implementing the necessary workforce reductions. We intend to finalize our direction for this transformation by the end of fiscal year 2025 and execute it decisively from fiscal year 2026 onwards.



## Drafting Vision 2030 and rebuilding challenged businesses

In February 2025, we announced Vision 2030, articulating our long-term aspirations and the strategic efforts required to achieve them. From our T-2021 plan formulated in 2019 to T-2026 formulated in 2024, we had adopted a rolling method, annually reviewing and releasing as the next three-year Medium-term Management Plan. However, given the potential for significant shifts in our business portfolio three years down the road due to ongoing restructuring, this year we opted to release Vision 2030 instead of another Medium-term Management Plan. Vision 2030 outlines our desired state for 2030, beyond the ongoing business restructuring and its initiatives and measures to achieve it. Meanwhile, our immediate focus is on ensuring the successful attainment of our 2025 goals.

In “Vision 2030,” we have set quantitative targets for 2030 to achieve our long-term Vision of “Contribute to a sustainable society through advanced materials and solutions”. These targets include net sales of 500 billion JPY, EBITDA of 20%, and ROIC of 12%. Although we now find ourselves in a business environment with uncertain outlooks and amidst business structure reform that encompasses various options, the targets we have set out in Vision 2030 are based on a bottom-up calculation, with additional growth potential factoring in M&A opportunities. From my perspective, these are fully achievable numbers.

Vision 2030 puts forth three initiatives: drastic

structural reforms, commitment to growth markets, and sustainable value creation. First and foremost among these is drastic structural reform, which we intend to tackle as a top priority.

I believe it is crucial to remain steadfast in our approach to future structural reform. As an example, market conditions for graphite electrodes have historically been subject to significant fluctuations, and while the market has been stagnant since the 2018-2019 electrode bubble, “mini bubble” could potentially occur in the future. Even if such situation arises, however, I am determined not to embark on a strategy of restarting facilities to pursue volume.

The strengths of our graphite electrodes lie in technology and quality. We have absolute confidence in the quality of our products, and with over a century of accumulated technical expertise, we are capable of producing some of the world’s largest graphite electrodes. In electric arc furnace steelmaking, where graphite electrodes are used, there is a trend towards higher currents and greater power, which is expected to increase demand for large-diameter, high-quality graphite electrodes. From our perspective, instead of pursuing volume, we should specialize in business where we can leverage our strengths and demonstrate value. This, I believe, is the focus we must steadfastly adhere to as we work to restructure our business.



## Discerning the next growth drivers and forging ahead

Despite somewhat dampened by the re-election of President Trump, the trend towards sustainability will undoubtedly remain unchanged. Addressing carbon neutrality is a necessary challenge for survival in a carbon-neutral society. Our Group is tackling a range of social issues with a long-term vision of providing solutions for realizing a sustainable society. However, I personally wish to emphasize the importance of thoroughly considering what we view as our growth drivers to ensure our Group's continued growth in the future society. At present, I identify two such growth drivers.

One is the Fine Carbon business, which targets the semiconductor industry, expected to show dramatic growth with the proliferation of AI, 5G, IoT, and other technologies. While there is currently a talk of slowdown in the EV market, the medium- to long-term shift towards EVs will likely remain unchanged. As mentioned previously, our strategic partnership with France-based Soitec regarding the supply of polycrystalline SiC wafers, which serve as supporting platforms for power semiconductors used in EVs and all electronic devices, has created new business possibilities for our company. It is possible that our products will be supporting the automotive industry in the not-so-distant future. The semiconductor industry is prone to significant ups and downs, but by continuing our cost reduction efforts to strengthen competitiveness and accurately

discerning the optimal timing for production increases while considering future demand trends, business opportunities should expand.

Another growth driver is the Carbon Black business, where approximately 70% of sales generated is from the tire industry. Tires are automotive parts of crucial importance in the sense that human lives depend on their performance. As such, we cannot sacrifice quality to reduce costs. Heavy EVs are said to demand even greater performance from tires. The need for high-quality tires and environmentally friendly tires will likely increase.

I am confident that these two growth drivers will propel our Group toward sustainable growth.





# Discovering new possibilities and always providing answers

Through sunny days, cloudy days, and even during continuous heavy rain like now, our Group's employees have consistently put in hard work and effort.

Over my ten years as president, I have always been mindful of the desire to adequately reward these dedicated employees after achieving solid profits. Recognizing that our company's foundation is supported by the employees who work diligently on the front lines, we have earnestly engaged in employee engagement surveys. Moving forward, based on the survey results, we will strategically promote work style reforms, implement appropriate HR systems and competitive compensation, and prepare various training programs to support employee growth, all with the aim of ensuring that diverse talent wishes to work with us.

The number of mid-career hires has increased as our business expands, and I believe that our corporate culture is changing significantly as well. However, it also appears that employees are polarizing into those who perform as expected or even beyond, and those who fall short of expectations, something that I analyze as stemming from insufficient communication. While there is insufficient communication between frontline employees and management, and among management layers themselves, some employees who work diligently

may be struggling alone when their efforts don't yield results. It is crucial to engage in thorough dialogue and alleviate anxieties, enabling everyone to responsibly move forward towards our stated goals.

I am not entirely satisfied with the current evaluation of our Group by capital markets. Our Group has demonstrated high technological capabilities across various business domains, delivering high-quality products to our customers. To foster expectations for our Group's future among shareholders and investors, I sincerely hope that you will take an interest in and follow the progress of "Vision 2030," which our Group has outlined. While there are still many uncertain factors, including business structural reforms, I hold a strong conviction towards achieving the quantitative targets we have set.

I invite you to hold great expectations for the future of the Tokai Carbon Group. Even amid heavy rains, we will discover new possibilities and present new solutions.

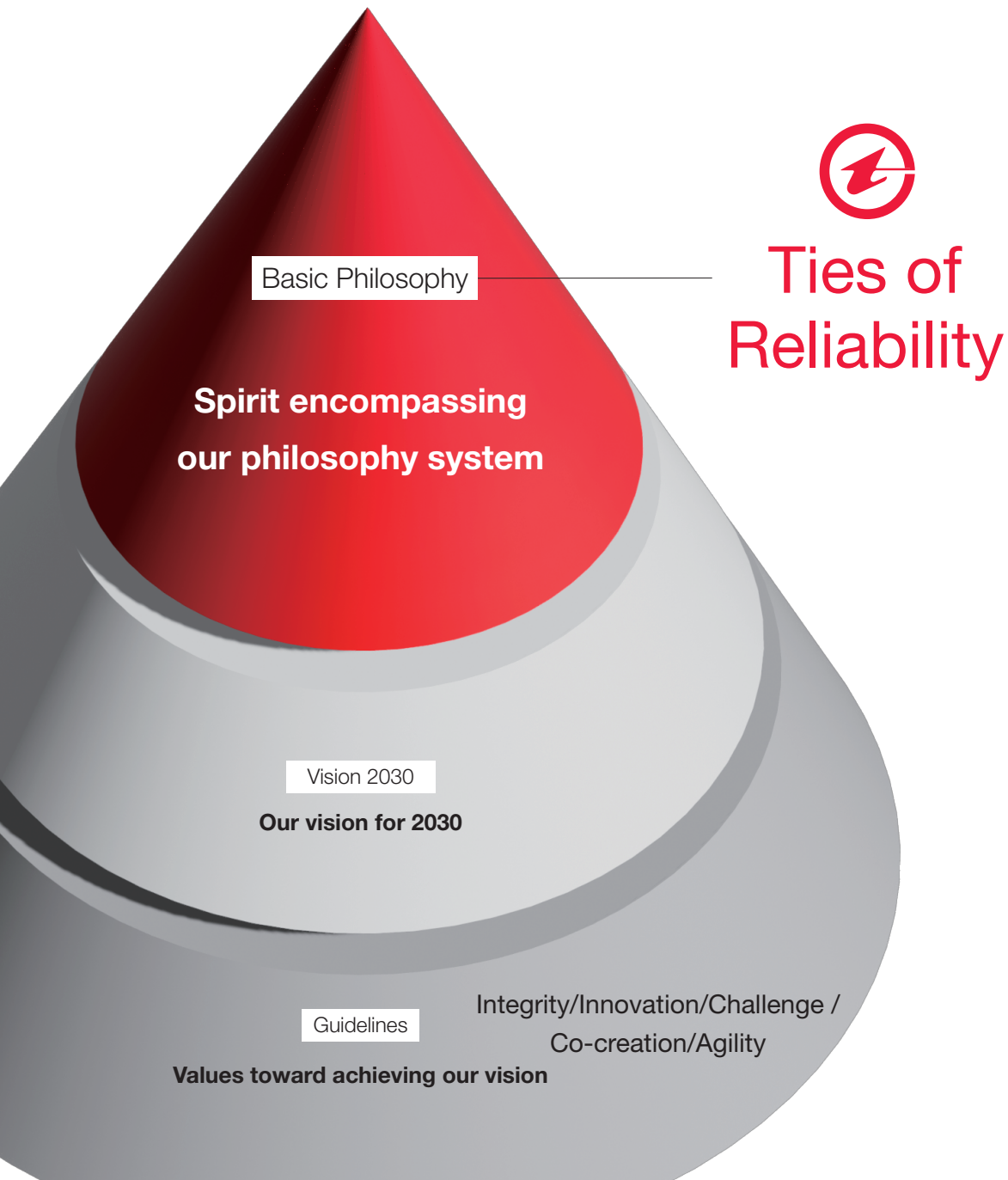




# Philosophy

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## Corporate Philosophy

The “Ties of Reliability” lasting for more than a century will be our driving force going forward.

Our value creation journey, spanning more than a century, has been built on the trusting relationships we have forged with all of our stakeholders. The basic philosophy underpinning our management is “Ties of Reliability,” which sets forth our values of acting with seriousness and integrity. An example of this philosophy in action is our relationships with customers—delivering high quality products, fostering long-term relationships, ensuring reliable supply, providing swift emergency response, offering expert technical services, and driving development of materials—to live up to their trust in our company.

Our materials, such as graphite electrodes indispensable for steel recycling, carbon black as a raw material for high-quality tires, and cutting-edge materials required for semiconductor manufacturing, are all essential for supporting industrial infrastructure and require a reliable, long-term supply. We have accumulated trust through co-creation with our customers, raw material suppliers, shareholders, business partners, employees, and society. With a number of global mergers and acquisitions, we have encountered partners that resonate with our philosophy of “Ties of Reliability,” and such partnerships have been instrumental in transforming us into a global company, generating roughly 80% of sales from international markets.

Our greatest pleasure is to know that our stakeholders believe “We can succeed together with Tokai Carbon”. Moving forward, we are committed to strengthening our unique, enduring competitive advantage “Ties of Reliability”. Through this process, we aspire to co-create and expand new value with our stakeholders.



# History of Value Creation

As society changes, so do the values that are required. Over our century-plus history, the value we create has also evolved with the times. This evolution was achieved through the extraordinary dedication of our employees, coupled with the trust and inspiration of our customers and business partners.

Founded 1918-

## Level.01

Contribution to Japan's industrialization



Founded in April 1918, our purpose was to achieving "self-sufficiency in quality electrodes" for electric arc furnace steel making, a venture initiated to utilize the then-excessively available hydroelectric power.

### Ties of Reliability Episode 01

In 1934, we successfully manufactured the world's largest 18-inch diameter electrode. Repeated improvements and expansions of facilities helped meet the national mission of domestic self-sufficiency.

## Level.02

Contribution to global infrastructure development



Our export ratio began to climb around 1955, driven primarily by increased demand of graphite electrodes from overseas.

In 1987, we established a local subsidiary, TOKAI CARBON AMERICA, in New York.

From around 1996, our Fine Carbon business initiated global market expansion through the establishment of processing and sales facilities in Europe, the U.S., and Asia.

## Level.03

Expanding globally to realize localized production and consumption model

Five M&A deals totaling approximately 180 billion JPY since 2017 have increased our overseas sales ratio to roughly 80%.

### Ties of Reliability Episode 02



Our M&As proceeded amicably, due to the resonance of our century-long history of operation and our core philosophy of "Ties of Reliability".

## Level.04

Offer solutions, services, and products for realizing a sustainable society as Core Values

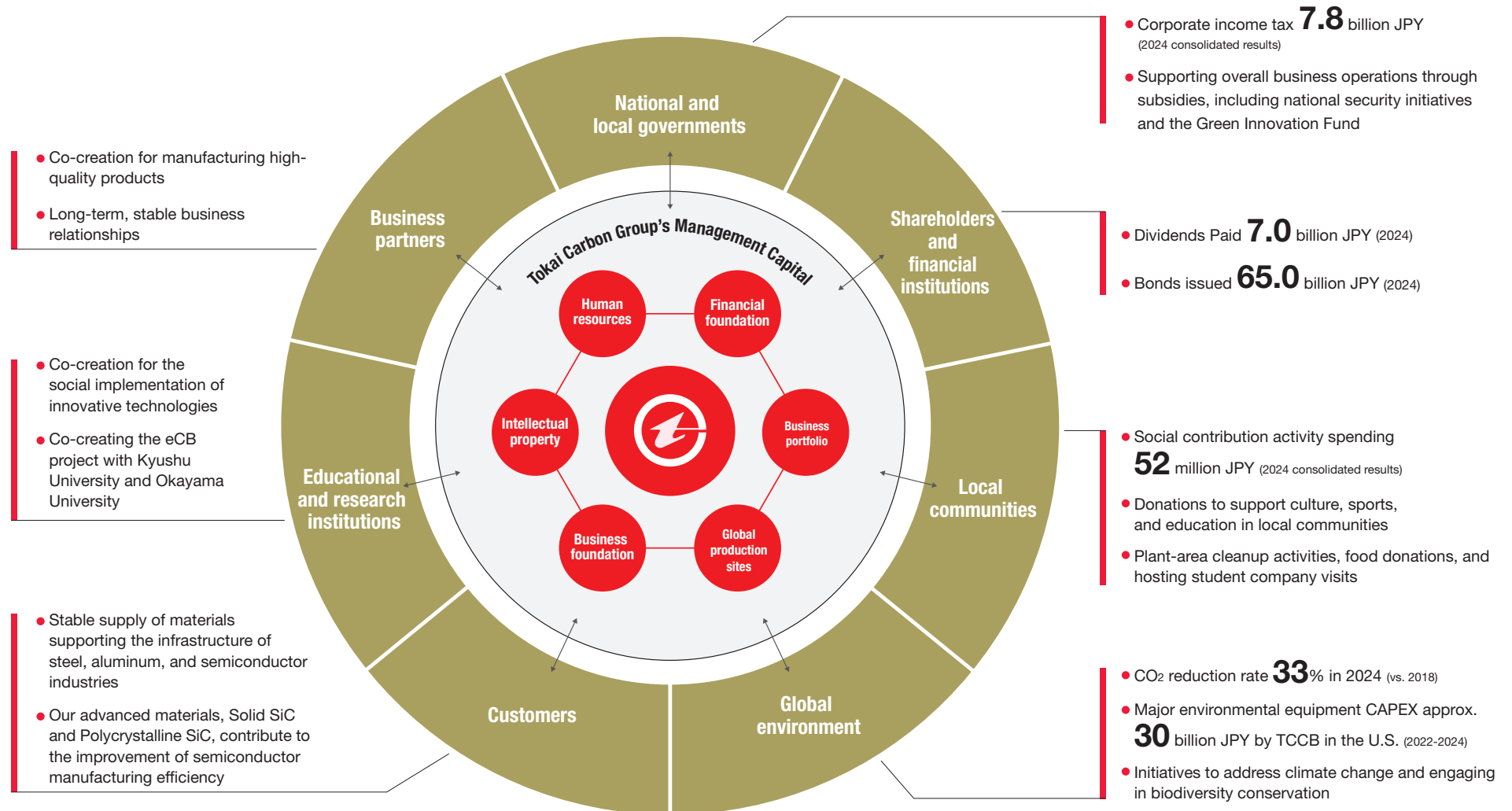
Delivering value to future generations

**Long-Term Vision**  
**Vision 2030**



# Value Creation Process

Our value creation process is based on our basic philosophy: Ties of Reliability. Through co-creation and trusted relationships with our stakeholders, various forms of value are consistently generated from Tokai Carbon's management capital, thereby further strengthening these Ties of Reliability.





# Management Capital

Our value creation stems from the management capital we've cultivated as our strength. This value circulates to people, society and the global environment, growing as it flows back into our management capital, leading to further value creation.

## Human resources

Number of employees (consolidated)

**4,625**

Overseas employee ratio **71%**

Our people are the driving force behind our value creation. Internal briefings are held to instill our basic philosophy and long-term vision. Initiatives are implemented to boost employee loyalty and engagement.

## Intellectual property

High-temperature heat treatment technology

Fine particle control technology

Advanced material development capabilities for semiconductor manufacturing equipment

Our accumulation of technologies that drive competitive advantage leads to our next wave of solution-based value provision. This includes the development of Solid SiC for semiconductor etching equipment as well as our surface treatment technology for fine-particle carbon black which has led to the development of carbon black for inkjet printers.

## Business foundation

**107** years since founding

Ties of Reliability with customers, suppliers and partners

Our quality and technical expertise, honed through long-term co-creation with customers and raw material manufacturers, have accumulated its value based on the culture of our basic philosophy—"Ties of Reliability."

## Financial foundation

Total assets **640.7 billion JPY**

Net D/E ratio **0.34 times**

Rating & Investment Information, Inc. (R&I)

**A**

Japan Credit Rating Agency. Ltd. (JCR)

**A+**

We maintain and enhance a stable financial foundation to support our business strategies. By allocating capital within the scope of our investment capacity, guided by an optimal capital structure and hurdle rate consideration, we strive to expand business profits.

## Business portfolio

Business segments **6 Business Divisions**

Optimizing capital allocation through ROIC management

Target for company-wide economic spread

**7% or more**

While aiming to maintain and improve ROIC spread to enhance ROIC corporate value of each business division, we simultaneously aim to allocate management resources to maximize overall economic profit

## Global production sites

Manufacturing sites **40 or more**

Overseas sales ratio **79%**

Sales ratio to U.S. **33%**

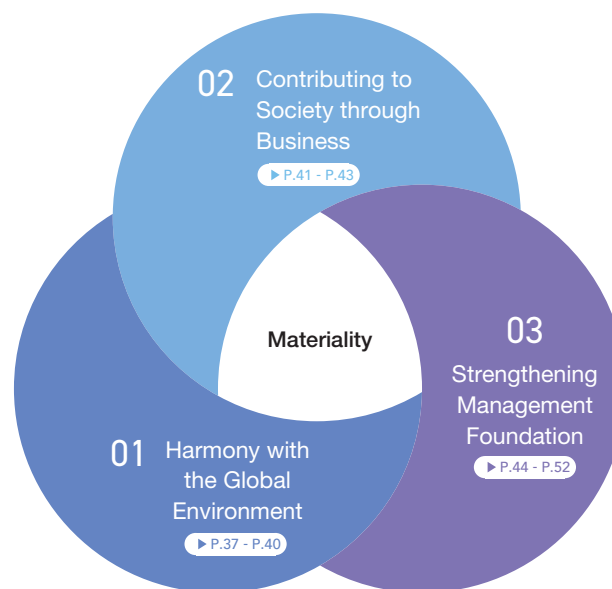
Establish global manufacturing sites in demand centers for our core businesses of Carbon Black, Fine Carbon and Graphite Electrodes (local production for local consumption model) One of the world's largest high-temperature heat treatment facility production capacity: 213,000 tons (as of 2024 end)



## Materiality

# Tokai Carbon's Materiality

Tokai Carbon's long-term vision is to "contribute to a sustainable society through advanced materials and solutions" through co-creation with its stakeholders. We have identified materiality (key issues) by considering the challenges to society and to the Company. We will sincerely address each materiality, contribute to the realization of a sustainable society, and appropriately disclose the status of our efforts.



### Materiality identification process



## 01

### Reduction of environmental impact

#### Realizing a circular economy

#### Impact on Tokai Carbon/Society

- Reduce climate change risks and contribute to a carbon-neutral society
- Reduce environmental impacts through R&D and products  
(Graphite Electrodes: Contribute to the reduction of CO<sub>2</sub> emissions during steel production)
- Curbing resource depletion
- Biodiversity conservation
- Mitigate the impact of climate change risks on business
- Increase sales through the creation of new businesses
- Respond to stricter environmental regulations
- Reduce the risk of operational decline due to the depletion of raw materials and energy

## 02

- Technological innovation
- Providing safe and secure products
- Supply chain management
- Respect for human rights
- Contributing to communities

#### Impact on Tokai Carbon/Society

- Contribute to industrial development through R&D and products  
(CB: Support automotive safety and performance; FC: Support the advancement of the semiconductor industry; S&L: Support the development of the aluminum industry)
- Realize a diverse society
- Create local employment
- Social contribution through innovative technologies and new products
- Preventing misconduct such as human rights violations
- Build strong relationships with suppliers

\* CB: Carbon Black, FC: Fine Carbon, S&L: Smelting and Lining

## 03

- Strengthening corporate governance
- Thorough enforcement of compliance
- Securing diverse talent
- Promoting occupational safety and health

#### Impact on Tokai Carbon/Society

- Nurture human resources who contribute to the realization of a sustainable society
- Mitigate the risk of misconduct
- Ensure employee health, safety, and basic standard of living
- Improve employee engagement through a comfortable and motivating workplace environment



# Corporate Strategy

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- 23 Dividend Policy



Vision 2030

Contribute to a sustainable society through advanced materials and solutions

“Contribute to a sustainable society through advanced materials and solutions”  
—Our long-term vision toward 2030.  
In the pressing movement towards carbon neutrality, this statement illustrates our resolve to boldly take on the challenge of entering new business domains. This commitment also clarifies our company’s purpose of existence as “contribution to a sustainable society”.

Our vision for 2030

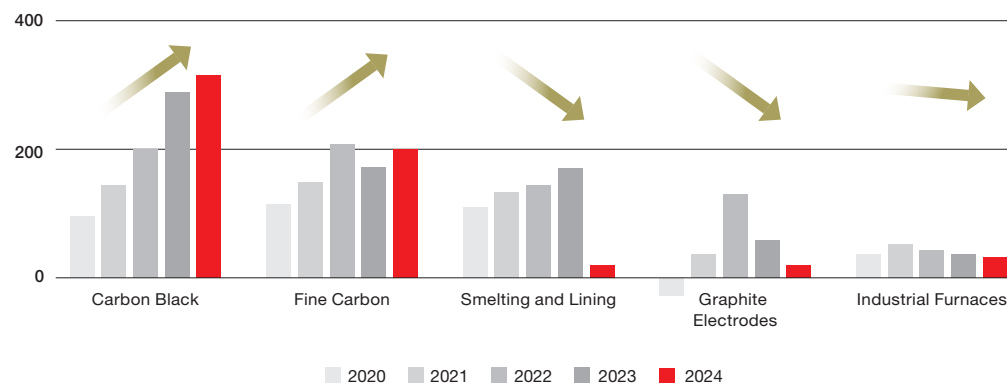
<div>Net sales</div> <div>500 billion JPY</div>	<div>View of the company size</div> <div>View as a company that supports infrastructure worldwide over the long term and in a stable manner</div>
<div>EBITDA margin</div> <div>20%</div>	<div>Earning capacity</div> <div>Receive compensation for providing quality products and services that contribute to the society</div>
<div>ROIC (adjusted)</div> <div>12%</div>	<div>Improving capital efficiency</div> <div>Business entity that can consistently generate ROIC exceeding WACC long-term</div>



## Consolidated Earnings Summary (2020 to 2024)

The Carbon Black business boosted the Company's overall earnings, backed by growing strong demand in North America. The Fine Carbon business is also undergoing increasing profit growth due to demand for next-generation semiconductors for EVs. Earnings in the Graphite Electrodes and the Smelting and Lining businesses decreased rapidly, necessitating structural reforms. For the Graphite Electrodes business, we decided to consolidate our domestic production into a single site in Japan, and to divest our manufacturing site in Germany. In the Smelting and Lining business, we have implemented stopgap measures, including the full impairment of intangible fixed assets such as goodwill. However, from 2025 onwards, our focus will shift to structural reforms aimed at fundamentally rebuilding its value creation capabilities. With shrinking profits in both the Smelting and Lining and the Graphite Electrodes businesses, Carbon Black and Fine Carbon accounted for 85% of the total company EBITDA in FY2024. To maintain a healthy business portfolio, it is crucial to revitalize and develop the two segments through structural reforms.

EBITDA by segment from 2020 to 2024 (one hundred million JPY)



### Performance outlook by Business Segment

Carbon Black	Fine Carbon	Smelting and Lining	Graphite Electrodes	Industrial Furnaces
2025 2026 2027	2025 2026 2027	2025 2026 2027	2025 2026 2027	2025 2026 2027
<p><b>Remaining strong</b></p> <ul style="list-style-type: none"> <li>Annual growth for tire production to continue at 3%.</li> <li>The supply of both the petroleum- and coal-based raw material oil falls due to carbon neutral trends.</li> </ul>	<p><b>Growth expected</b></p> <ul style="list-style-type: none"> <li>Memory semiconductors will bottom out. The silicon market is projected to grow at approx. 10% annually.</li> <li>Due to a deceleration in EVs, demand in SiC semiconductor related materials will rapidly decrease in 2025; but growth will continue over the medium and long term.</li> </ul>	<p><b>Gradual recovery</b></p> <ul style="list-style-type: none"> <li>Replacement demand for cathodes for aluminum smelting is weak in 2025 due to the impact of inventory digestion by customers.</li> <li>Purchases are projected to return to a level of actual demand from 2026.</li> <li>Aluminum will continue to grow at 3% annually.</li> </ul>	<p><b>Recovery to take time</b></p> <ul style="list-style-type: none"> <li>Recovery will take time on the back of the worsening supply-demand balance and emerging new players.</li> <li>In the longer term, a rise in demand for graphite electrodes is expected, driven by the shift from blast furnaces to EAF.</li> </ul>	<p><b>Gradual recovery</b></p> <ul style="list-style-type: none"> <li>Demand for MLCC is projected to recover from the second half of 2026, growing 5 to 10% annually.</li> <li>Due to a deceleration in EVs, full-fledged capital investment for the LiB market is projected from 2026.</li> </ul>



## Challenges Facing Our Company

Our Company's business environment is in a period of transition. Significant changes in the international landscape include the Russian invasion of Ukraine and the rise of economic nationalism. In terms of the competitive landscape, the increasing production capacity and quality improvement of Chinese manufacturers represent a major change. And more than just climate change, issues related to biodiversity are becoming prevalent as global environmental issues, and these are positioned as important management issues in our business strategy. Under Vision 2030, we are committed to addressing these crucial challenges with a long-term perspective.





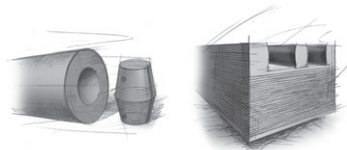
## Three Initiatives to Achieve Vision 2030

We will address three issues for achieving Vision 2030. The most pressing issue is the need to address the worsening profitability of the Graphite Electrodes and the Smelting and Lining businesses. While the challenges facing each business differ, we will implement fundamental structural reforms to swiftly stop the bleeding and restoring profitability in the short term. In contrast, we are aiming to achieve solid growth by allocating management resources in a proactive manner to Carbon Black, Fine Carbon and Industrial Furnaces that are positioned as growth businesses. For our long-term

efforts, we will continue to focus on “Sustainable Value Creation,” which involves offering solutions that contribute to a sustainable society. Innovations in products, technologies, and manufacturing methods that consider finite resources and enable us to pass on a rich global environment to future generations are crucial themes that will enhance Tokai Carbon’s contribution to society.

### <Short-term intensive measures>

#### Drastic structural reforms

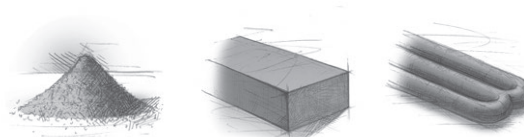


Graphite Electrodes Smelting and Lining

We will accomplish structural reforms mainly in the Graphite Electrodes and the Smelting and Lining businesses to improve earnings in a short-term and intensive manner.

### <Medium-term measures>

#### Commitment to growth markets



Carbon Black Fine Carbon Industrial Furnaces

To ensure long-term profitability in the Carbon Black business, we are investing in key initiatives such as the relocation of the Thai plant and major environmental facilities in the U.S. For the Fine Carbon and the Industrial Furnaces businesses, we are focused on capturing medium- to long-term growth opportunities in their respective markets by increasing production capacity and developing new markets.

### <Long-term measures>

#### Sustainable value creation

All Businesses

New Businesses

R&D

We position solutions for a sustainable society as our value proposition across all our businesses. This involves a comprehensive review of our existing product manufacturing throughout the entire supply chain. We will leverage our proprietary technologies while actively pursuing innovative technologies to create new markets.

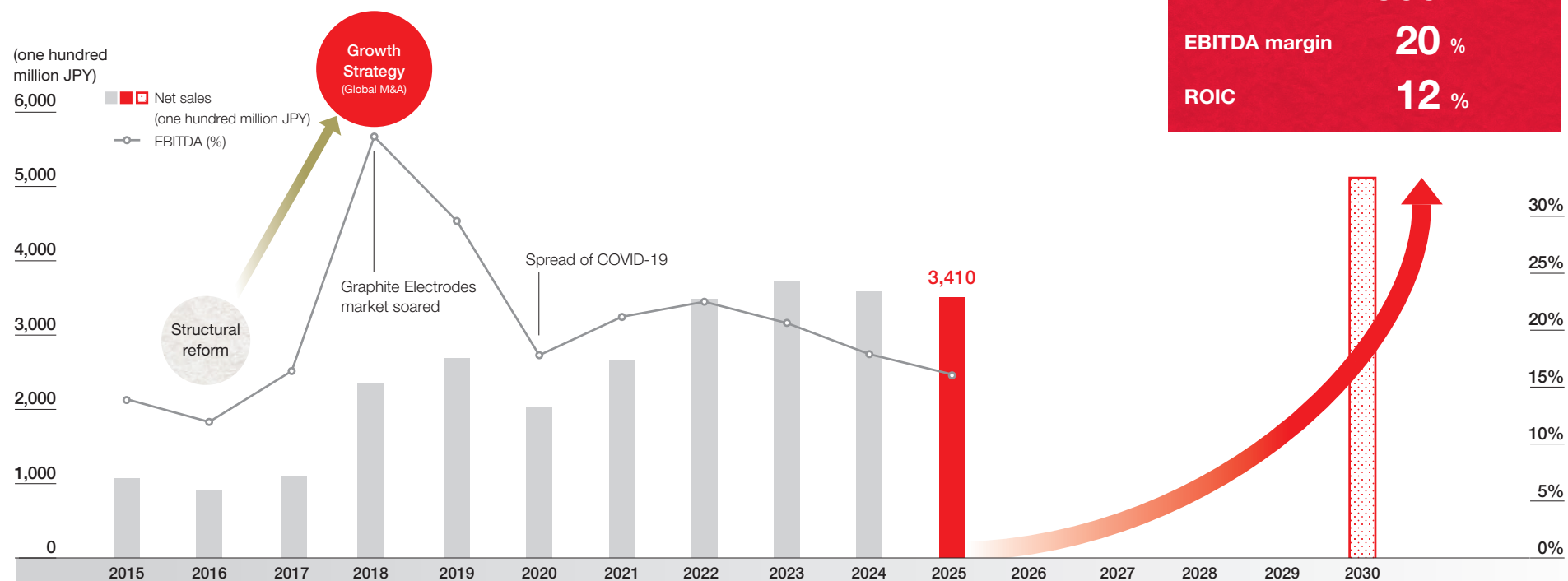


## Current Measures to Achieve the Performance Targets of Vision 2030

In 2025, EBITDA will reach a trough as the core Carbon Black and the Fine Carbon businesses will decline. Yet from 2026 onward, the effects of structural reforms in the Graphite Electrodes and the Smelting and Lining businesses are anticipated to become evident, with recovery expected for growth businesses.

## Vision 2030

Net sales	500 billion JPY
EBITDA margin	20 %
ROIC	12 %



### Downward factors for 2025

- Increase in costs due to parallel operation of new and existing plants related to operation of a newly built carbon black plant in Thailand
- Rapid decrease in demand for fine carbon for SiC semiconductors (market inventory cutback phase)
- Delay in the recovery of industrial furnaces for MLCCs (rapid decrease in the EV market)

### Upward factors from 2026

- Restoration of earning power due to structural reforms of the Graphite Electrodes and the Smelting and Lining businesses
- A state-of-the-art carbon black plant to be launched in Thailand
- Distribution network of fine carbon to be strengthened through investments in the U.S.
- Continuing growth of industrial furnaces for MLCCs (deployment of next-generation fast baking furnaces)

### Factors toward enhancing long-term corporate value

- Contribution to realizing a circular economy
- Creation of new business areas

\* EBITDA is an acronym for Earnings Before Interest, Taxes, Depreciation & Amortization (calculated by adding back depreciation to operating profit)



## Enhancing Business Portfolio Management

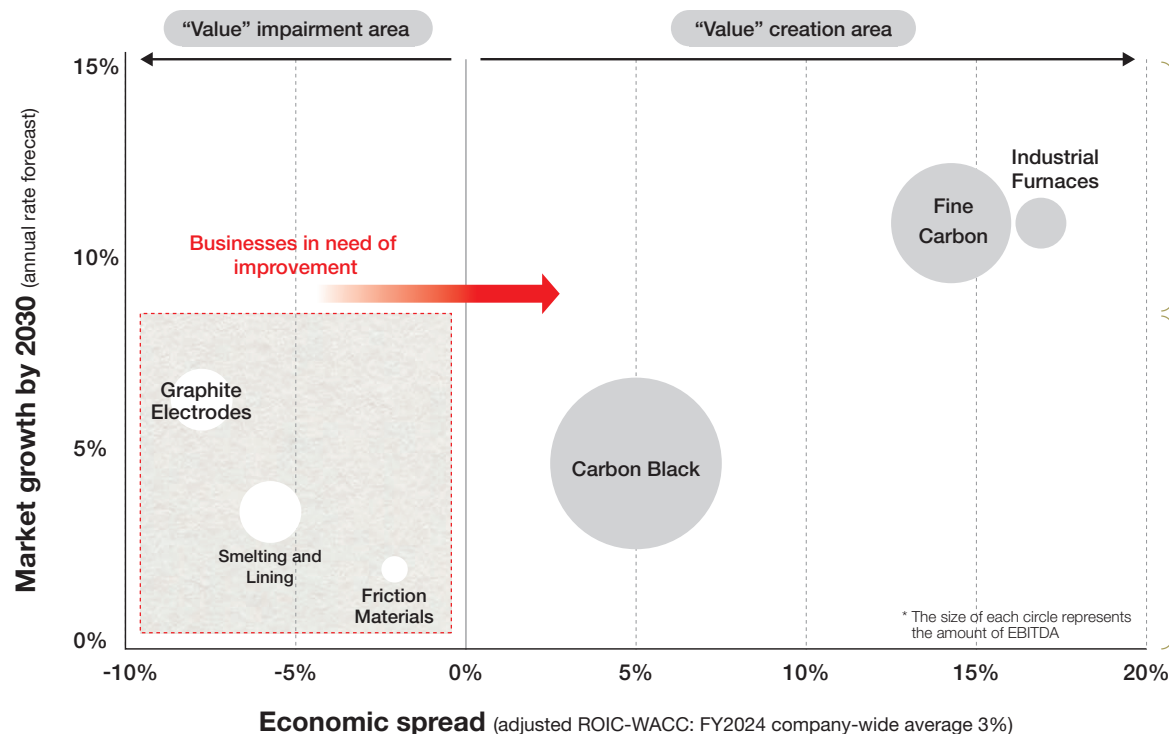
### Aims to enhance its corporate value by allocating management capital in a manner that maximizes economic profit

We take into account consistency with our long-term vision, the future potential of businesses, the competitive landscape, and our strengths to allocate management capital through the use of business-specific ROIC, WACC, and other metrics.

Under Vision 2030, we will adopt a short-term focus on structural reform in the Graphite Electrodes, the Smelting and Lining, and the Friction Materials businesses,

while making more deliberate and bold growth-oriented investments, based on a medium-term perspective, in the Fine Carbon and the Industrial Furnaces businesses, which have a greater economic spread. In the Carbon Black business, we aim for continuous value creation as a stable business, implementing sustainability-related initiatives. By actively allocating capital to businesses with large economic spreads while also undertaking focused capital investment in other businesses, we aim to achieve a company-wide economic spread of 7% or greater.

Aiming to allocate management resources to maximize economic profit [(ROIC-WACC) x invested capital], targeting 7% or higher company-wide economic spread to enhance corporate value



### Growth businesses

(Fine Carbon, Industrial Furnaces)

Direction	Growth investment
Action	<ul style="list-style-type: none"> <li>Development of next-generation materials and products</li> <li>Ramp-up of production in line with market growth</li> <li>Strengthening of sales in growth areas</li> </ul>

### Core business (Carbon Black)

Direction	Continuation of stable value creation
Action	<ul style="list-style-type: none"> <li>Large-scale environmental investment (mainly in the U.S.)</li> <li>Investment in relocation of the Thai plant</li> <li>Investment in R&amp;D for high-function CB</li> </ul>

\* The market growth rate has been estimated by the Company.

\* EBITDA, ROIC, and WACC are actual results for FY2024. WACC is managed by calculating risks for each business. ROIC uses adjusted ROIC that takes in account goodwill and goodwill amortization.

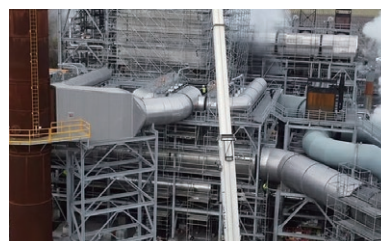


## Major Planned Investments

### Investments in Carbon Black as the “core business” and Fine Carbon and Industrial Furnaces as “growth businesses” will continue

Since 2017, Tokai Carbon has steered its growth strategy primarily towards global M&A. To reduce our reliance on Graphite Electrodes, we have executed investments aimed at maximizing the value creation capabilities of each segment, thereby striving to optimize our business portfolio. In the high-ROIC, high-growth Fine Carbon and Industrial Furnaces businesses, which serve the semiconductor and electronic components industries, we are actively implementing capacity expansion projects to facilitate business growth. For our core Carbon Black business, we made significant environmental capital investments at our U.S. facilities from 2021 to 2024 to foster sustainable value creation. These environmental investments have now reached a significant milestone, and moving forward, we are establishing a system to expand value creation while coexisting with natural capital. Furthermore, the relocation of our Thai facility is planned to enhance business continuity and establish a supply system that prepares for future environmental measures. We consider capital expenditure planning as extremely important from the perspectives of our long-term vision, business portfolio management and sustainability, and we are making company-wide decisions conscious of selection and concentration from an optimal capital allocation perspective. With changes in the business environment becoming increasingly dynamic and intense, we are placing great importance on quick decision-making cycles.

Investments in Carbon Black as the “core business” and Fine Carbon and Industrial Furnaces as the “growth businesses” will continue from a medium- to long-term perspective.



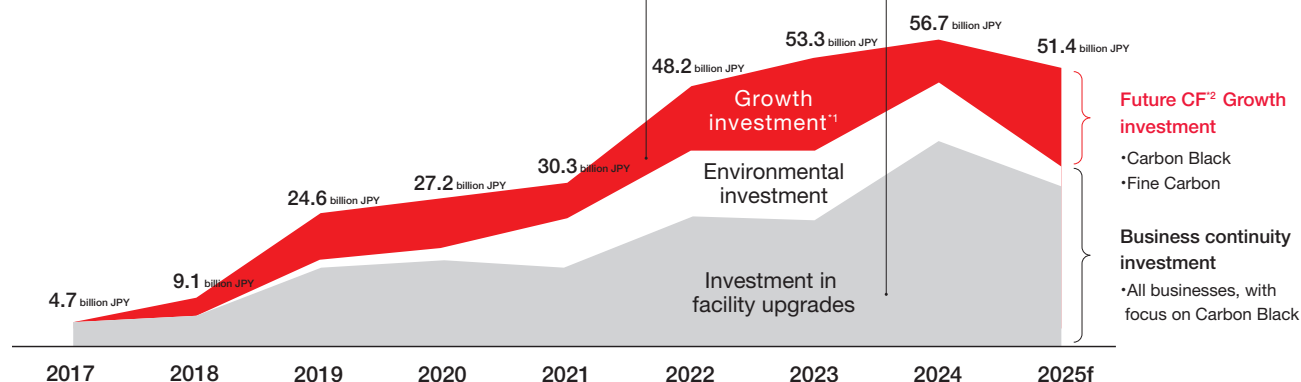
#### Carbon Black: Large-scale environmental capital investments (2021-2024)

- Greatly reduce burdens on the atmospheric environment by significantly lowering the emission of NOx (nitrogen oxides) and SOx (sulfur oxides) produced during the manufacturing process



#### Carbon Black: Relocation of the Thai plant (2023-2025)

- Reduce the environmental impact by securing the Company's own land and introducing state-of-the-art facilities. A sustainable supply system is to be established (approx. 35 billion JPY)



\*1 Growth investment is organic investment (M&As are excluded).

\*2 Future CF: Future cash flow



## Financial and Capital Policy (Optimal Capital Structure)

**Aiming for an adjusted net D/E ratio of approximately 0.35x as the optimal capital structure that ensures sufficient financial soundness (A rating or higher) and capital efficiency supporting business growth**

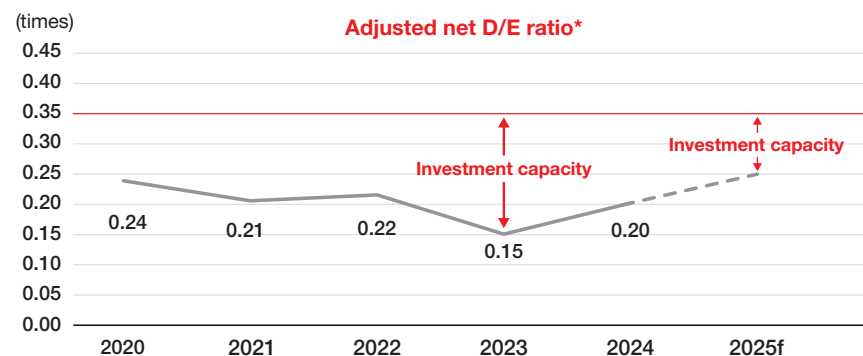
Our basic financial and capital policy aims to enhance corporate value through advanced business portfolio management. This involves maintaining sufficient financial soundness to support business growth in response to changes in the business environment, while simultaneously achieving both a reduction in the cost of capital and an improvement in capital efficiency.

Specifically, we ensure a stable fundraising base by maintaining a credit rating of

### Target metrics for financial soundness and capital efficiency

Adjusted net D/E ratio	<b>Approx. 0.35 times</b>
Net interest-bearing debt/EBITDA	<b>Approx. 1.0 times</b>
WACC	<b>5% or less</b>

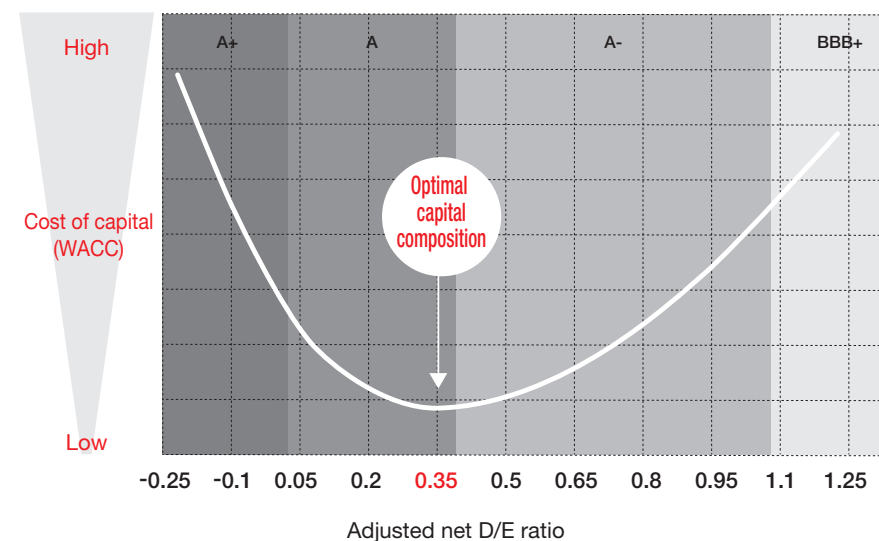
By allocating capital based on a hurdle rate within a range of the investment capacity that considers the optimal capital structure, we aim to increase business revenues.



\* Adjusted net D/E ratio: A net debt-to-equity ratio that takes into account the equity credit of hybrid financing obtained from rating agencies.

A grade or higher, which is crucial for financial institutions and bond investors. At the same time, we have set our adjusted net D/E ratio after hybrid finance adjustments at approximately 0.35x. This represents our optimal capital structure for achieving a low Weighted Average Cost of Capital (WACC), which is significant from the perspective of equity investors. We use this as our financial discipline. Based on our business and investment plans to achieve the “ideal state” outlined in Vision 2030, we will appropriately assess our financial and investment capacity. This will enable us to execute capital allocation where investments, retained earnings, liquidity, debt procurement/reduction, and shareholder returns are all consistently aligned.

### Balance between financial soundness (credit rating A) and minimization of capital costs (WACC)



The adjusted net D/E ratio to be achieved is approx. 0.35x as an optimal capital structure that balances financial soundness (credit rating A) and minimization of capital costs (WACC).



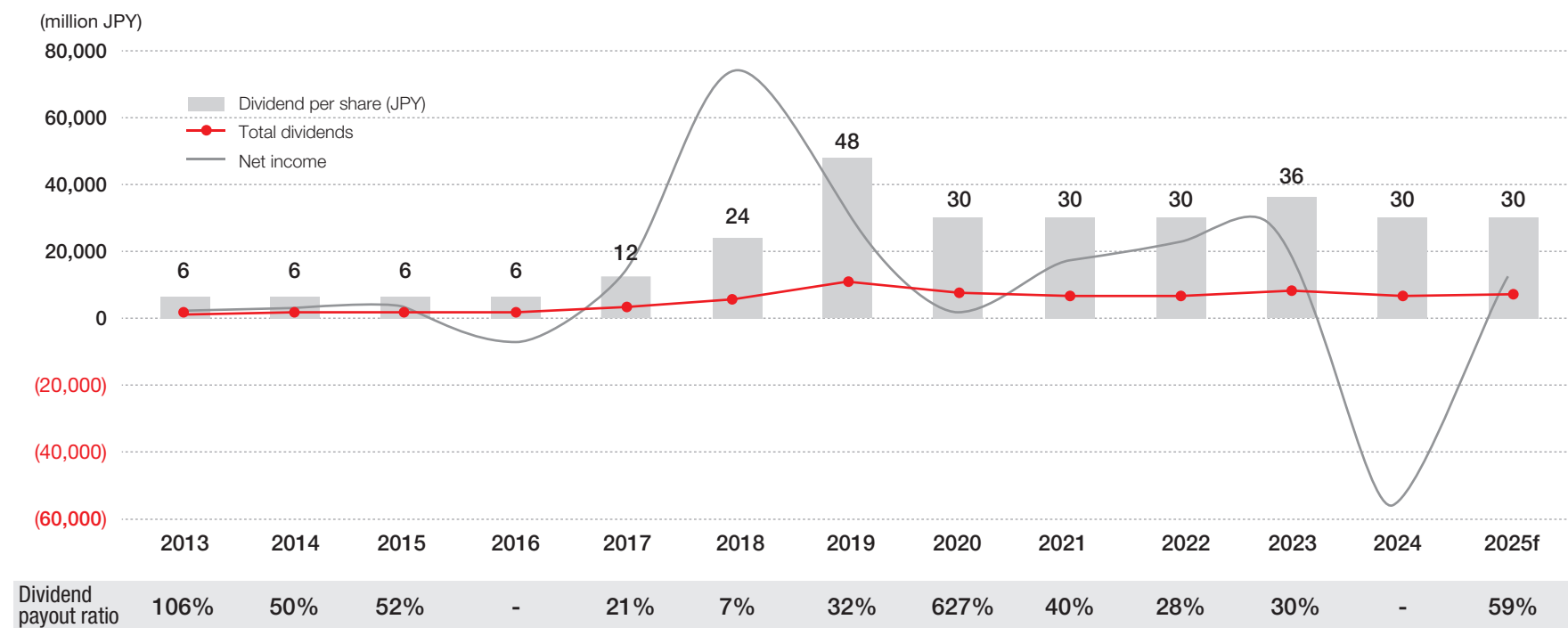
## Dividend Policy

### Aiming for stable and consistent dividends amid fluctuations in net income, with a target dividend payout ratio of 30%

Tokai Carbon considers the return of profits to shareholders as an important management issue for improving corporate value over the medium to long term. In light of this, our basic policy is providing stable and continuous dividends with the aim of a consolidated dividend payout ratio of 30%. This is determined by taking into account the financial results and outlook, investment plans, cash flow conditions, and other factors of each fiscal year. Under our capital allocation policy, which prioritizes value-enhancing initiatives including business investments, dividend decisions consider not

only single-year performance but also medium-term outlooks and preparations for growth investment opportunities. While the Company incurred a net loss in FY2024 for reasons including the recording of structural reform costs, we proceeded with an annual dividend of 30 JPY per share, in line with the projection at the start of the fiscal year. While we expect the dividend payout ratio to exceed 30% in FY2025, we plan to maintain an annual dividend of 30 JPY per share.

### Net income and total dividends



\*f = forecast



# Business Strategy

- 25 Carbon Black
- 27 Fine Carbon
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- 33 Industrial Furnaces and Related Products

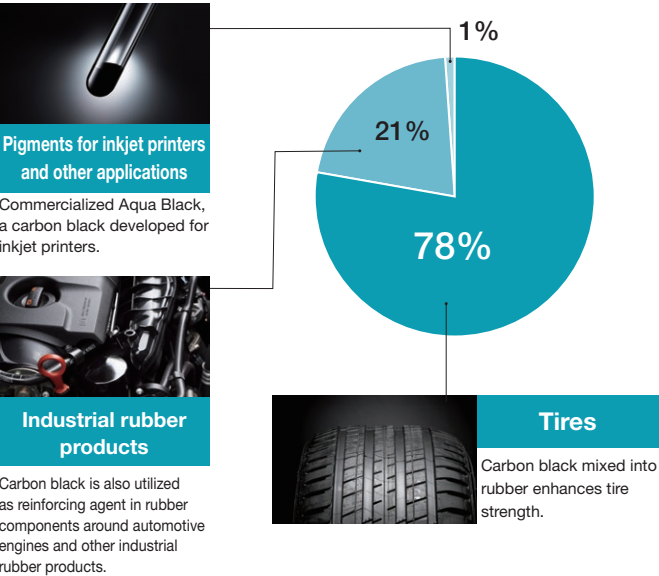


# Carbon Black

## Business Overview

Carbon black is a carbon particulate material measured in nanometers (one billionth of a meter). Its diverse grades, defined by difference in particle size, structure (how particles connect), and surface properties, exhibit varied performance. Carbon black is primarily used as a rubber reinforcing agent. Accounting for nearly 20-30% of the weight of tires, it gives tires their black color and is indispensable to maintaining tire strength. It is also used for various applications including reinforcing agents for other rubber products, colorants for plastics, electric wire sheathing, and pigments for inkjet printers.

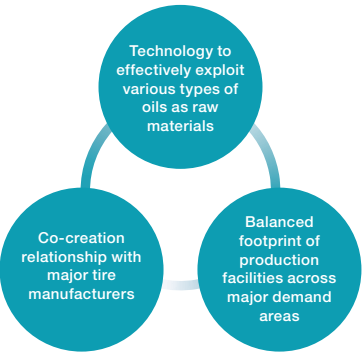
### Application Breakdown (2024)



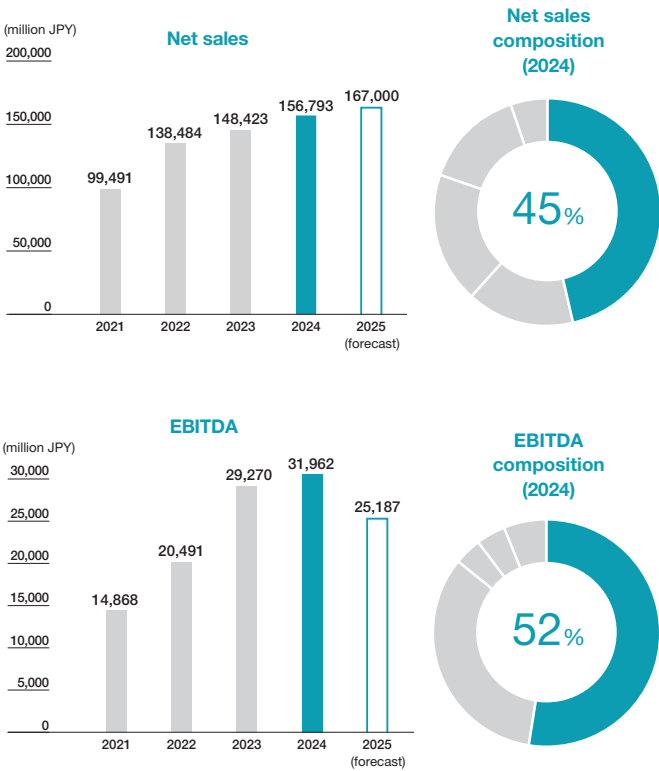
## Our strengths

A key challenge for us was to effectively utilize pitch oil, a byproduct of our in-house pitch coke production, which is a raw material for our foundational product; graphite electrodes. As a solution, we undertook Japan's first industrial production of carbon black using the oil furnace method, the mainstream production method used today. Over time, we've accumulated technology to skillfully utilize various types of oil and precisely control properties, laying the foundation of our current competitive advantage. Our strengths also include contribution to local tire production for local consumption through strategically located production sites in the U.S., Japan, and Thailand, where many tire manufacturers are present. We also enjoy an advantage in our ability to supply specialty carbon black made from natural gas at our Canadian site.

### Three Key Strengths



## Earnings summary



	2023	2024	2025f
Net sales	1,484	1,568	1,670
Operating profit	213	217	132
ROS	14%	13.8%	7.9%
ROIC (adjusted)	12%	9.5%	5.4%
EBITDA	293	320	252

(100 million JPY)



## Looking back on 2024

Our Carbon Black business has significantly expanded in scale, notably due to the 2018 M&A of production and sales bases in the U.S.. It has now developed to become our largest core business in terms of sales volume.

In FY2024, this business accounted for 45% of our Group's total sales. However, the primary U.S. market faced increased imports of inexpensive tires from Asia, forcing our major tire manufacturing clients to adjust its production of aftermarket (replacement) tires. However, we have proactively expanded sales of high-performance carbon black for premium tires that sees less competition from low-cost tires. In the Japanese market, automobile production decreased YoY, and sales of tires for export remained sluggish. The Thai market was impacted by a significant YoY decline in automobile production, compounded by the imposition of anti-dumping duties on Thai-made truck and bus tires destined for the U.S. market. Conversely, our Canadian site saw a substantial increase in its demand for specialty carbon black, driven by a competitor's withdrawal from production.

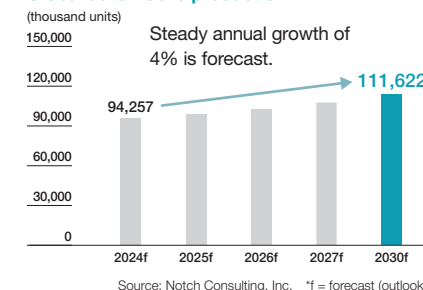
## Outlook and strategy

The carbon black business environment is significantly influenced by the trends in production of tires, which account for approximately 70% of our carbon black demand. Tire demand is broadly categorized into replacement tires and original equipment tires. Global tire production volume is expected to grow approximately 3% per year.

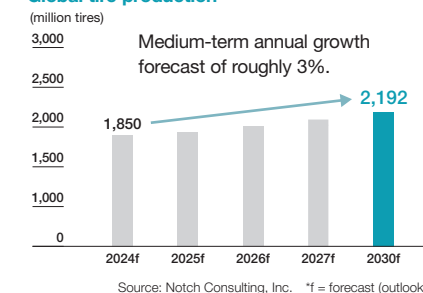
In 2025, we're focused on ensuring stable sales volume in the U.S. market through strategic contracts with key customers, while also strengthening the sales expansion of new product grades. Plant relocation project in Thailand is progressing smoothly, with the new plant scheduled to begin operating in mid-2025. The new plant and existing plant will be operated in parallel for some time, aiming to fully transfer production to the new plant by mid-2026. Our goal is to quickly securing higher productivity and improved quality.

Looking ahead, we will continue to focus on the development of high-performance carbon black for premium tires. We will also engage in industry-government-academia collaboration on the development of technology to recover carbon black from used tires (rCB) and imbue it through secondary processing to achieve rubber reinforcement properties equivalent to virgin carbon black, thereby contributing to the realization of a circular economy. Furthermore, we will actively invest in environmental improvements and equipment modernization to reduce environmental footprint, boost productivity, and ensure stable operation.

### Global automobile production



### Global tire production



RISK  
Chance

#### Business risks and opportunities

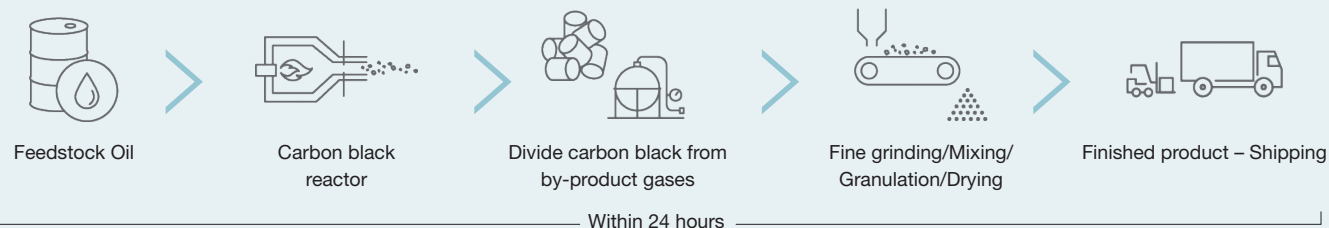
Global tire production annual growth rate of 3%  
Increasing concerns over tightening feedstock oil supply  
Expansion and acceleration of environmental initiatives

#### Medium-term action

Equipment renewal investment to ensure stable production and supply  
Securing necessary volume of feedstock oil and transferring cost increases to sales prices  
Technology development for realizing circular economy

### Manufacturing process

Carbon black is made with the incomplete combustion of oil residue from petroleum refining and coal dry distillation in a reactor. The collected carbon black goes through granulation and other processes before being packed in bags or loaded into exclusive carbon black transport vehicles for shipment.





# Fine Carbon

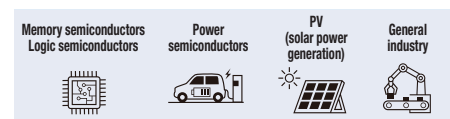
## Business Overview

Fine carbon refers to specialty carbon, graphite materials, along with their processed products, developed through the pursuit of optimal raw material compositions to meet the intricate needs of semiconductor manufacturing and other fields. It also includes processed graphite products coated with ultra-high-purity silicon carbide (SiC) and standalone SiC products (Solid SiC). While these fine carbon materials and products are not widely known, they play essential roles in the manufacturing processes of silicon and SiC, which are core materials for memory and power semiconductors used in smartphones, personal computers, data centers, EVs, and many other applications. Over 70% of the sales of our Fine Carbon business is attributed to semiconductor applications. Specifically, our products are used as components in semiconductor manufacturing equipment, silicon single crystal ingot pullers, SiC single crystal ingot manufacturing equipment, etc. Beyond semiconductors, they are also used in general industrial applications such as electrodes for electrical discharge machining and dies for continuous casting, as well as in solar cell applications such as components for solar-grade silicon single crystal pullers.

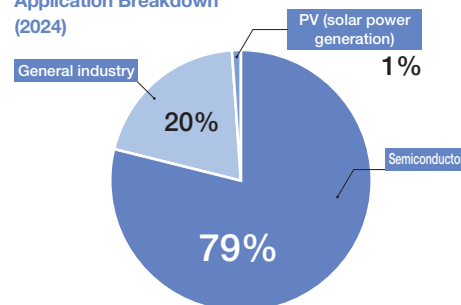
## Our strengths

While only a limited number of manufacturers globally can produce high-quality specialty carbon and graphite products, Tokai Carbon stands among the industry leaders in both quality and production capacity. Notably, we possess the world's largest production capacity for SiC coated products and Solid SiC products, underpinned by our technological prowess. Graphite materials produced at our plant in Kumamoto Prefecture, Japan are processed to optimal specifications for customer applications at our domestic and international sites before shipment. Our manufacturing and sales network for fine carbon materials and products extends globally, meeting customers' needs through a diverse product lineup. Through our process of co-creation and developing new products in cooperation with customers, we have built strong trusting relationships and expanded our business domains. The synergies from these relationships of trust and technological expertise forms our competitive advantage.

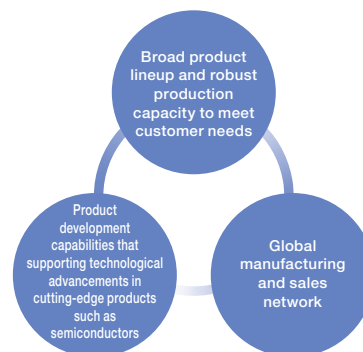
### Target markets



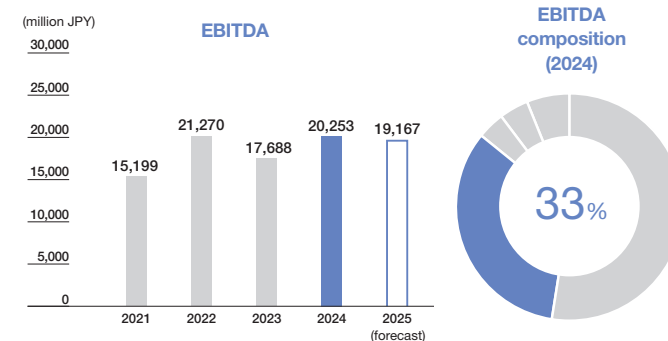
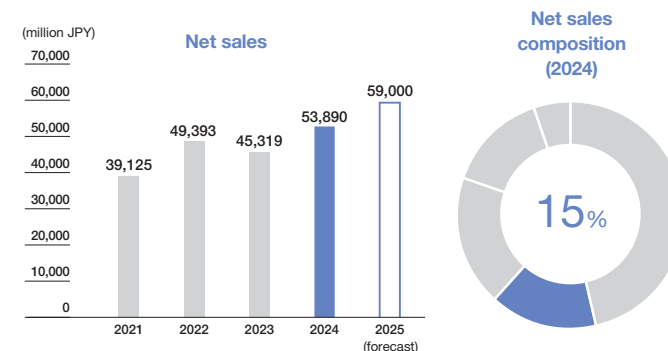
### Application Breakdown (2024)



### Three Key Strengths



## Earnings summary



	2023	2024	2025f
Net sales	453	539	590
Operating profit	106	124	82
ROS	23%	23%	13.9%
ROIC (adjusted)	21%	18.8%	14.5%
EBITDA	177	203	192

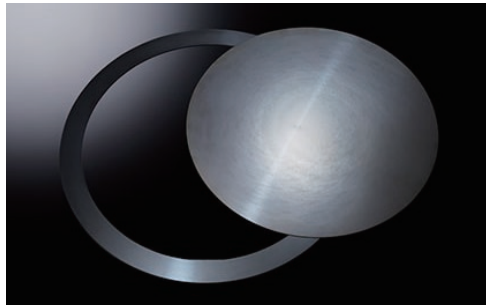
(100 million JPY)



## Looking back on 2024

The memory semiconductor market, which was sluggish in 2023 due to a decreased demand for PCs and smartphones, showed a gradual recovery in 2024. As a result, sales volume of Solid SiC focus rings, used in the upstream plasma etching process for memory semiconductor manufacturing, increased.

Conversely, the sluggish growth in EV demand led to successive inventory adjustments and CAPEX postponements among power semiconductor manufacturers. This caused a slowdown in the SiC power semiconductor business from the second half of 2024.



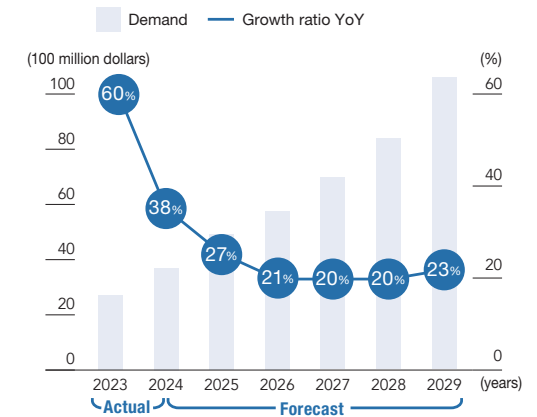
▲ Solid SiC (SiC) focus ring (left) and dummy wafer (right)

## Outlook and strategy

The memory semiconductor market is expected to experience short term fluctuations but is projected to continue growing in the medium to long term, amid the proliferation of 5G and advancements in AI. With higher vertical stacking of 3D-NAND requiring higher plasma output in etching equipments, demand for Solid SiC focus rings that feature high plasma resistance is growing. Looking ahead, as DRAM is also expected to attain a 3D structure similar to NAND, further expansion in demand is expected.

The SiC power semiconductor market is stagnant at present under slowing EV demand, but is expected to grow again from 2026. Looking toward mid—to-long-term market growth, we've increased our domestic graphite material production capacity and launched a production line for the polycrystalline SiC wafers, which serve as support substrates for bonded SiC wafers. Furthermore, by consolidation of U.S. machining/processing companies, we've strengthened our processing and sales structure in the U.S. market, where growth in the semiconductor and aerospace sectors is expected. Through these measures, we aim to lessen our dependence on Solid SiC focus rings and expand the manufacture and sales of high value-added products while capturing demand associated with market growth.

### SiC power semiconductor market



Source: "Power SiC/GaN Compound Semiconductor Market Monitor Q1 2024", Yole intelligence, with editorial adjustments by Tokai Carbon

#### Business risks and opportunities

RISK  
Chance

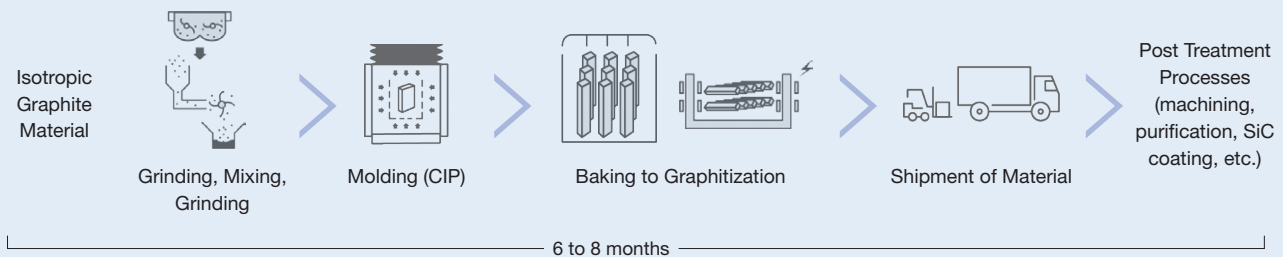
**Inventory adjustments in the SiC power semiconductor market**  
Continued recovery in the memory semiconductor market  
Medium to long term growth outlook for overall semiconductor market

#### Medium-term action

**Lessening our dependence on Solid SiC focus rings for memory semiconductors**  
**Investment to expand production capacity of our products for the SiC semiconductor manufacturing equipment, in anticipation of the SiC semiconductor market's resurgence.**  
**Renewal of graphite material manufacturing equipment**

### Manufacturing process

Isotropic graphite material, the base material of fine carbon products, is made by crushing coke, filling it into rubber molds, and hydraulically applying isotropic pressure. This is followed by baking and graphitization. Depending on the application, isotropic graphite material then undergoes post-processing steps such as machining and SiC coating to become a final product.





# Smelting and Lining

## Business Overview

The Smelting and Lining business consists of three main products. Our flagship cathode blocks are laid at the bottom of electrolytic furnaces for producing aluminum. Furnace lining plays an important role as a refractory lining material in blast furnaces that melt iron ore to produce pig iron. Carbon electrodes are used as conductors in submerged arc furnaces (SAFs) that smelt silicon metal, ferroalloys, lead, and other metals. These three products are supplied globally from our four production sites in Europe.

### Product Breakdown (2024)



**Carbon Electrodes**

Carbon electrodes are used as electrical current conductors in submerged arc furnaces (SAFs) that smelt silicon, ferroalloys, copper, and lead.



**Furnace Lining**

Blast furnaces use these blocks as a refractory material in the lining. Used in sections of blast furnaces where temperature load is high.



**Cathode Block**

Laid in the bottom of electrolytic furnaces for primary aluminum production.

### Three Key Strengths

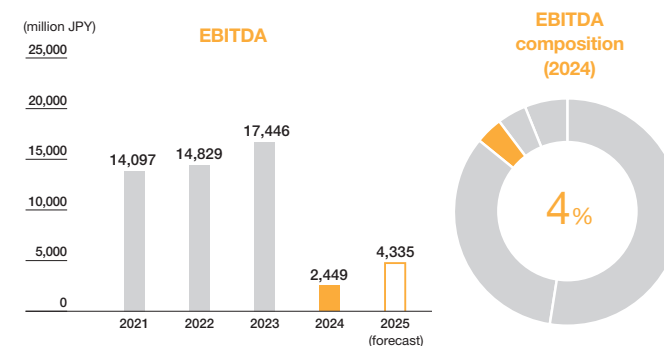
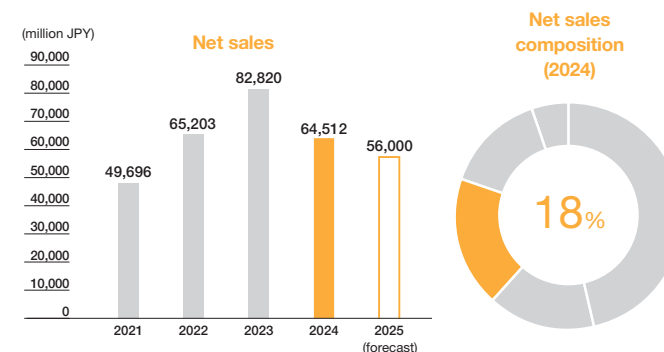


## Our strengths

We hold the top market share for graphitized cathodes and carbon electrodes in all markets excluding China. In furnace lining, we have established the top share in the global market including China, placing us in an industry-leading position.

Cathodes and furnace lining are not consumables that depend on production volumes of aluminum or steel. Instead, they are used long-term as critical furnace components. Once installed, cathodes typically remain in place for 5 to 6 years, and furnace lining for 15 to 20 years, without replacement. Boasting an extensive supply record and reliable quality, our products will continue to support global aluminum and steel production.

## Earnings summary



	2023	2024	2025f
Net sales	828	645	560
Operating profit	23	(137)	0
ROS	3%	(21.2)%	-
ROIC (adjusted)	14%	(1.2)%	0.0%
EBITDA	174	24	43

(100 million JPY)



## Looking back on 2024

Since the outbreak of the war in Ukraine in 2022, Europe, where the production bases of the Smelting and Lining business are located, has experienced surging energy and raw material costs, along with severe inflation. While we managed to secured profits through 2023 by transferring rising production costs to prices, 2024 proved more challenging. With production costs remaining high, our main product, cathodes, faced declining demand and aggressive competition, forcing us to reduce production and sales. Sluggish sales of furnace lining and a decline in carbon electrode demand have also had an impact, leading to a significant deterioration in profitability. As a result, we carried out an impairment of goodwill, customer-related assets, and other intangible fixed assets in FY2024.

### Utilization of swing capacity

Optimizes production according to demand by diverting and adjusting production facilities for the production of other products.

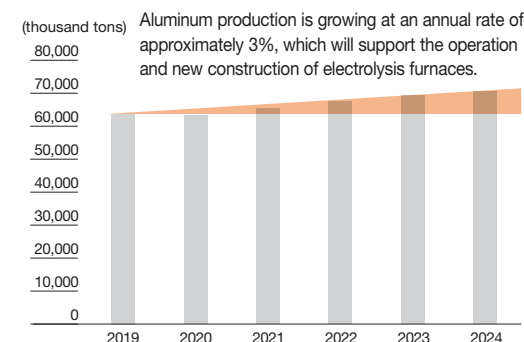


## Outlook and strategy

Demand for cathode blocks is expected to remain weak in 2025, as in 2024. However, global aluminum production is projected to continue expanding, leading to an increase in the relining and new construction of aluminum electrolysis furnaces, thereby driving higher cathode block demand. Stable demand for furnace lining is anticipated, particularly from China and India. Carbon electrode demand is forecasted to gradually recover from the second half of 2025, as customers work through their excess inventory of both silicon metal and carbon electrodes.

We are actively pursuing structural reforms to fundamentally restore the competitiveness of this business, with direction to be set within 2025 and execution planned from 2026 onwards. We will also continue our efforts to promote RuC® (Ready-to-use Cathode), which contributes to reducing the environmental impact of aluminum production by lowering power consumption and extending cathode block life, thereby reducing replacement frequency.

### Global primary aluminum production volume



Aluminum production is growing at an annual rate of approximately 3%, which will support the operation and new construction of electrolysis furnaces.

Source: International Aluminium Institute and our company estimate

### Business risks and opportunities

RISK  
Chance

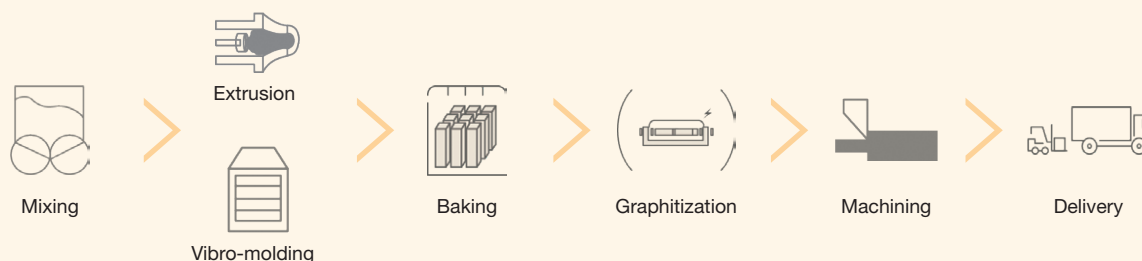
Sluggish demand for cathode block relining  
Prolonged inventory adjustments at carbon electrode customers  
Decline in energy costs  
Realization of new aluminum electrolysis furnace projects

### Medium-term action

Restoring competitiveness through structural reform  
Maintaining and enhancing market presence  
Promoting RuC®, next-generation environmentally friendly cathode

### Manufacturing process

In this business, materials are manufactured by mixing coke, anthracite, etc., extruding or molding them, followed by baking. These materials are then either machined directly into finished products or further graphitized before final machining.



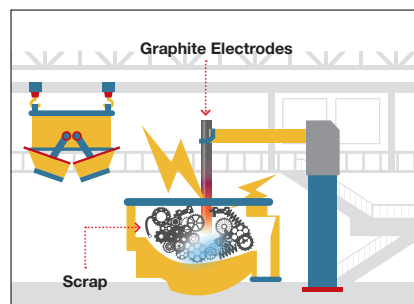
# Graphite Electrodes

## Business Overview

Graphite electrodes leverage their properties of electrical conductivity and superior heat resistance, and serve as conductors in EAF(electric arc furnace)s for melting steel scrap for recycling into rebar and other products. This demanding environment, with furnace temperatures reaching approximately 1,600°C and electrode tip temperatures exceeding 3,000°C, necessitates exceptionally high-quality electrodes that can deliver stable performance. As they are used, the tips of graphite electrodes gradually wear down; it's estimated that about 1.7 kg of graphite electrode is consumed to produce one ton of steel. For over a century, we've continuously supplied high-quality, low-consumption electrodes to EAFs in various countries and regions. The EAF method is gaining significant attention as an environmentally friendly steelmaking process in recent carbon neutrality efforts, as it can reduce CO<sub>2</sub> emissions by approximately one-quarter compared to the blast furnace method.

### Graphite electrodes melt scrap with arc discharge in EAFs

Approximately 1.7kg of graphite electrode is consumed to produce one ton of steel

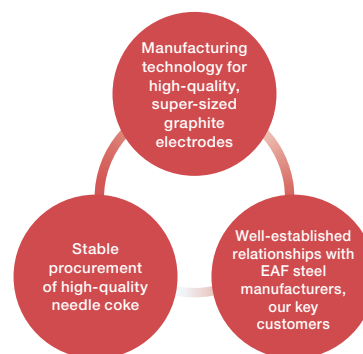


Electrode manufacturing process and usage (movie):  
<https://www.tokaicarbon.co.jp/en/products/graphite/>

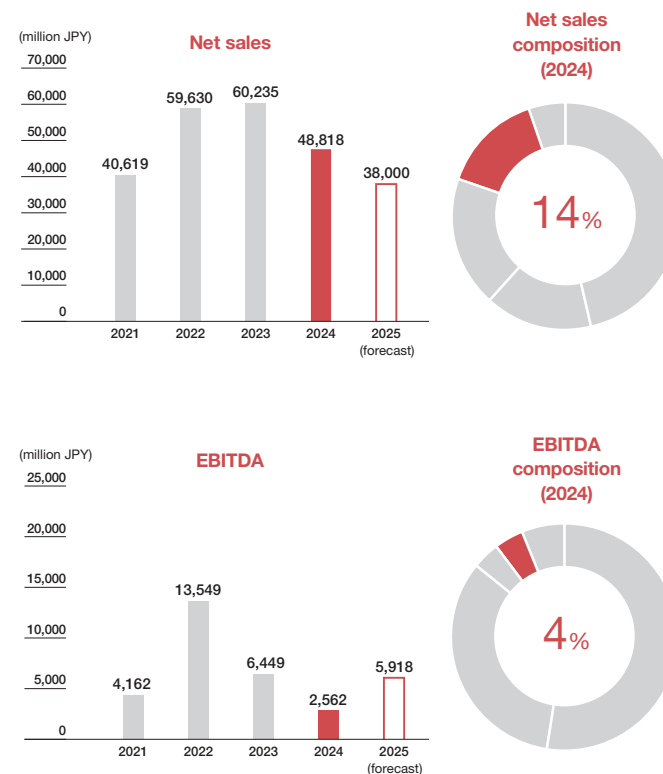
## Our strengths

As a pioneer in graphite electrodes, Tokai Carbon established Japan's first manufacturing technology for 24-inch electrodes and subsequently achieved early commercial production of the world's largest 32-inch super-size electrodes. Through this technological prowess, we reliably supply high-quality electrodes that feature low breakage and consumption during operation. Grounded in long-term relationships with suppliers, we have built strong relationships of trust with EAF steelmaker customers by stably procuring high-quality needle coke and continuously meeting their needs. Furthermore, we've enhanced our technical prowess by sharing the expertise cultivated over many years with our U.S. and European subsidiaries. These initiatives are the strengths that underpin our competitive advantage.

## Three Key Strengths



## Earnings summary



	2023	2024	2025f
Net sales	602	488	380
Operating profit	8	(35)	11
ROS	1%	(7.2)%	2.9%
ROIC (adjusted)	2%	(2.7)%	2.7%
EBITDA	64	26	59

(100 million JPY)



## Looking back on 2024

In 2024, the graphite electrode supply and demand remained soft in Japan and Europe due to several compounding factors. Japan experienced delays in construction projects, driven by soaring material costs and labor shortages, while Europe saw continued manufacturing stagnation. Adding to this, the sustained export of overproduced Chinese graphite electrodes and an aggressive influx of inexpensive Chinese steel products led to reduced EAF operating rates. In the United States, the demand for graphite electrodes remained firm amidst a relatively favorable economic environment. However, this period also saw an increased presence of low-priced Indian graphite electrodes. Given these conditions, we initiated a structural reform of this business in mid-2024. As part of this effort, we decided to consolidate our production system in Japan and reduce our European facility's production capacity by 30%.

## Outlook and strategy

While the business environment is expected to remain challenging over the short term due to weak market conditions, the most pressing issue is implementing fundamental structural reforms that we initiated in mid-2024. The consolidation of our production capacity in Japan was largely completed by the second quarter of 2025, ahead of schedule. For our European site where we decided to reduce production capacity by 30% the previous year, we announced in May 2025 a further decisive step to transfer this operation to a German investment fund. Through these measures, we are aiming to restore profitability of the business and achieve a rapid return to profitability.

In the medium to long term, demand for graphite electrodes is expected to increase in line with the carbon neutrality-related shift from blast furnaces to EAFs. We will increase our production and sales ratio of high-quality super-size graphite electrodes, mainly at our site in the U.S., where EAFs account for a large proportion of crude steel production and investment in large EAFs continues. While EAFs typically use steel scrap as raw material, it is anticipated that various other raw materials,

such as direct reduced iron (DRI), will be used in the future. We are committed to focusing on the development and production of high-quality graphite electrodes suitable for such evolving operating conditions.

### EBITDA by our manufacturing sites (image)



RISK  
Chance

#### Business risks and opportunities

Ongoing structural recession, particularly due to overproduction in China, leading to a global market downturn.  
Growing market presence of Chinese and Indian graphite electrode manufacturers.  
Increased demand for high-quality and super-size electrodes driven by the shift from blast furnaces to EAFs

#### Medium-term action


**Recovery of competitiveness through structural reform**  
**Focus on high-quality, super-size graphite electrodes**  
**Development of higher-quality electrodes suited to the shift from blast furnaces to EAFs**

### Manufacturing process


Graphite electrodes are manufactured by kneading needle coke, extruding it, and then subjecting the resulting material to baking, pitch impregnation, secondary baking, and graphitization processes, followed by final machining.

  
Kneading/  
extrusion molding



  
Primary baking  
(1 month)

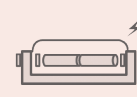


  
Pitch impregnation  
(Few days)



  
Secondary baking  
(2 to 4 weeks)



  
Graphitization



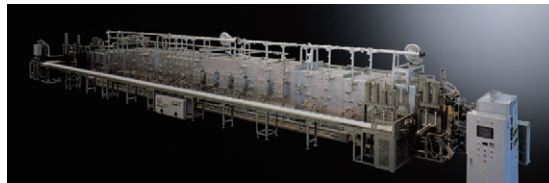
  
Finished goods – Delivery

# Industrial Furnaces and Related Products

## Business Overview

TKK, our wholly owned subsidiary, designs, manufactures, and sells custom made pusher-type and roller hearth-type heat treatment furnaces. They are primarily used for treating lithium-ion battery materials and electronic components such as multi-layer ceramic capacitors (MLCCs), with particular strength in pusher furnaces. As a pioneer in the industry, TKK commands roughly 50% of the global market for heat treatment furnaces for MLCCs, as well as world-class quality and market shares in the silicon carbide (SiC) EREMA heating elements used in float glass manufacturing and heat treatment furnaces.

## Industrial Furnaces



Industrial furnace processes (debinding, heating, sintering, etc.) ceramics, electronic components, secondary battery materials, glass, and powders at specified temperature and atmosphere.

## EREMA heating elements

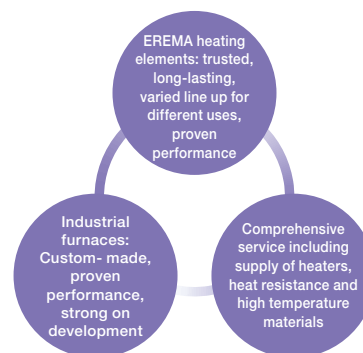


This energy-saving, clean, high-temperature, quality ceramic heater is used for sintering, melting, and heat treatment in electric furnaces, etc.

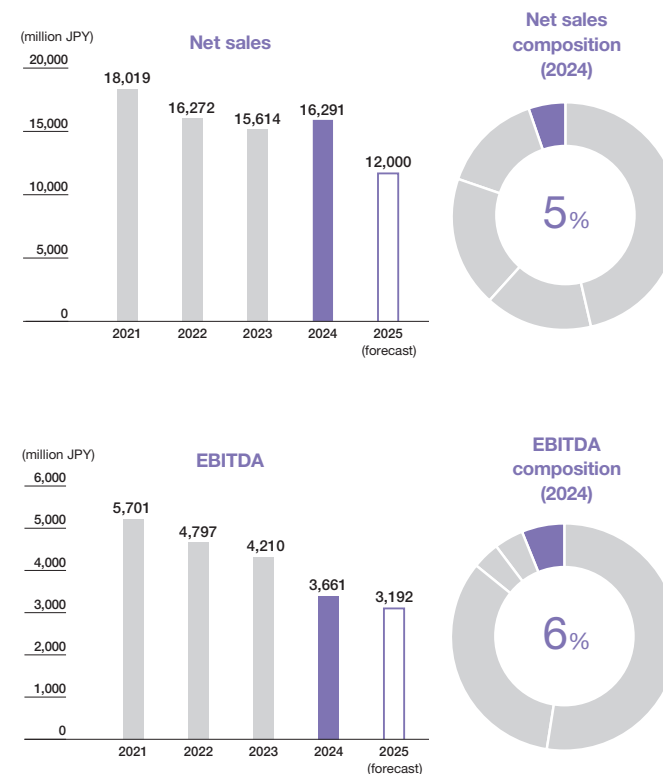
## Our strengths

Industrial furnaces are custom-ordered to meet specific customer requirements, and then literally evolve as various functions are added and improved. Through a corporate culture that rigorously responds to customer customization demands, we've honed our products and cultivated technical capabilities recognized by leading manufacturers in the industry, accumulating a strong track record. Particularly in industrial furnaces for MLCCs and lithium-ion batteries, our design capabilities and production technology, tailored to customer needs, are a significant strength of TKK. Furthermore, our EREMA heating elements in the heating element business boast overwhelming quality superiority. These strengths also create synergy, enhancing our new industrial furnace design capabilities.

## Three Key Strengths



## Earnings summary



	2023	2024	2025f
Net sales	156	163	120
Operating profit	39	33	26
ROS	25%	20.2%	21.7%
ROIC (adjusted)	28%	21.2%	15.2%
EBITDA	42	37	32

(100 million JPY)



## Looking back on 2024

In 2024, the MLCC industry experienced inventory adjustments due to decreased demand for smartphones and other devices. While there was some recovery in demand for AI data centers, it did not lead to a full recovery. Additionally, the slowdown in EV market growth led to delays in some customers' lithium-ion battery material projects, resulting in postponed deliveries of industrial furnaces.



Pusher furnace ▲

## Outlook and strategy

Recovery in MLCC and lithium-ion battery materials is anticipated to occur from 2026 onward, with new industrial furnace deliveries expected to decrease year-on-year in 2025.

Meanwhile, the MLCC industry is projected to grow at an annual rate of approximately 10% in the coming years, driven by the widespread adoption of 5G, EVs, autonomous driving, and AI data centers. Furthermore, despite the current slowdown in EV market growth, it is expected to re-accelerate eventually. Considering these market trends, TKK will continue to proactively invest in increased production capacity to align with market expansion. We anticipate new demand for industrial furnaces driven by increased capital expenditure, as well as greater demand for EREMA heating elements due to higher industrial furnace operating rates.

Expanding our industrial furnace business requires continuous development of next-generation furnaces. As MLCC-enabled products demand miniaturization and greater capacity, ceramic and electrode layers are becoming increasingly thinner. This

presents a challenge in accelerating the heating rate during material heat treatment. To address this, TKK is developing "TK-SONIC," a roller hearth furnace designed to dramatically improve heating speeds. Furthermore, to meet the needs for mass production of lithium-ion battery materials, we have developed a pusher furnace that significantly enhances both productivity and running costs. TKK remains committed to proactively pursuing the development of next-generation industrial furnaces, always looking ahead, rather than resting on its laurels as an industry leader.



Roller hearth furnace ►

### Business risks and opportunities

RISK  
Chance

Prolonged slowdown in EV growth

Increasing MLCC demand driven by automobile electrification and proliferation of AI

Continued EV growth expected to boost lithium-ion battery demand

### Medium-term action

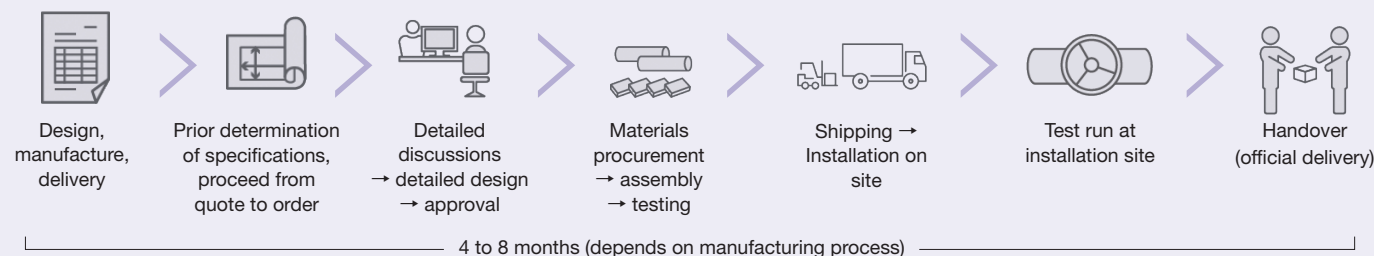
Expansion of production capacity to meet growing demand in target markets

Development of next-generation roller hearth furnaces

Deployment of next-generation pusher furnaces

## Manufacturing process

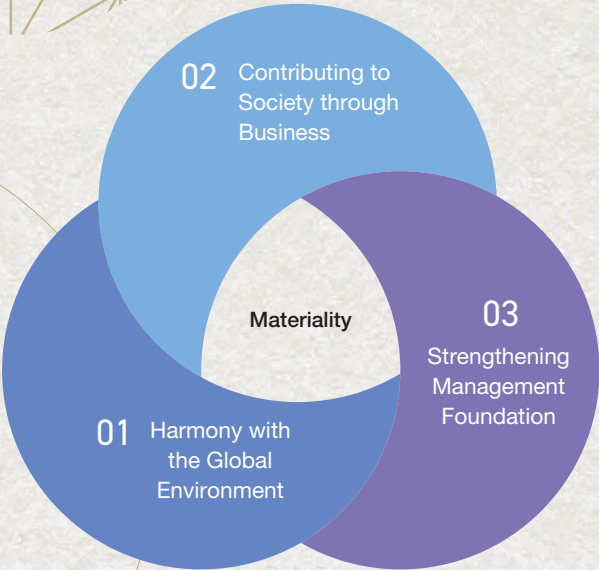
Industrial furnaces are designed and assembled to meet the individual requirements of customers, and then installed at customer plants.





# Sustainability

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## Basic Policy and Structure

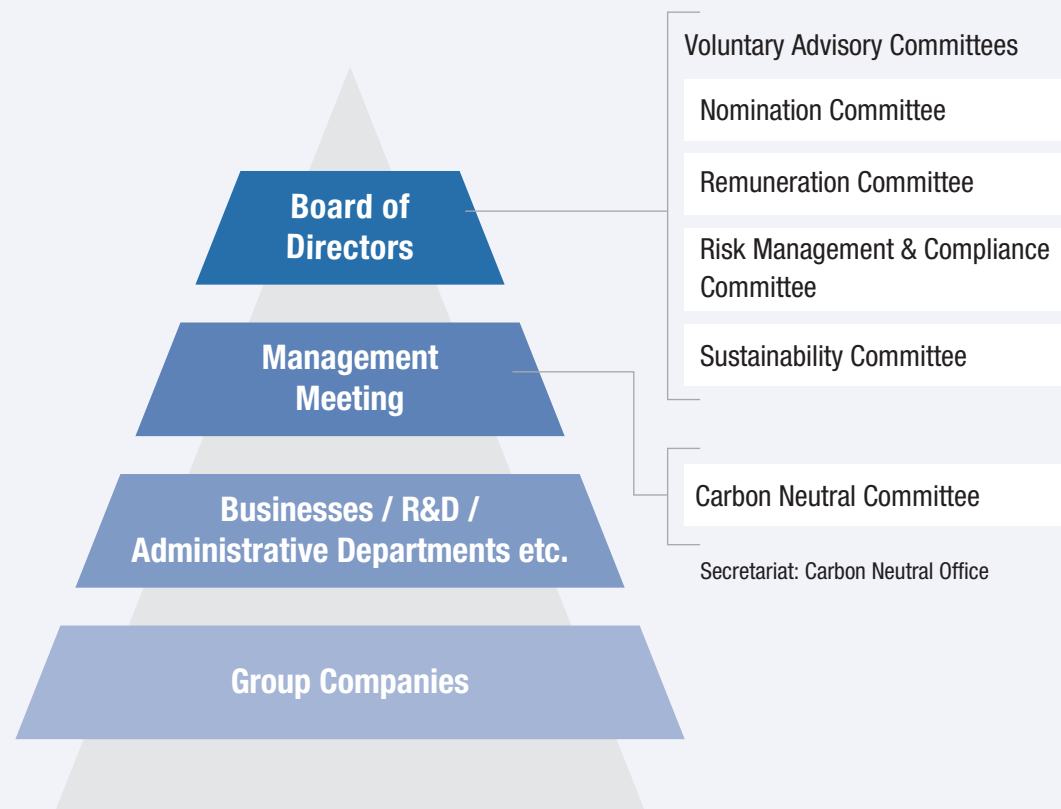
### Sustainability policy

Tokai Carbon Group engages in corporate activities under its basic philosophy of “Ties of Reliability” with our stakeholders. Our management strategies are grounded in a full consideration of ESG (Environmental, Social and Governance) aspects to solidly meet the trust of our stakeholders. We work to solve societal issues through our business to contribute to the realization of a sustainable society and the enhancement of our corporate value.

### Sustainability promotion structure

In January 2022, we established the Sustainability Committee as a voluntary advisory body to the Board of Directors. Chaired by the President and CEO, the Committee consists of the officers responsible for the General Affairs and Legal Affairs Department / Corporate Planning Department / Human Resources Department, the General Manager of the R&D Strategy Division / Technology & Engineering Division, and General Managers of four principal business divisions. It meets on a quarterly basis in principle to discuss important matters related to sustainability and submitting / reporting them to the Board of Directors. It also supervises the disclosure of sustainability information, including the creation of integrated reports.

Regarding climate change, we strengthened our framework in January 2022 by elevating the Carbon Neutrality Promotion Project, which was launched in May 2021, into the Carbon Neutral Committee, chaired by the President and CEO. As the command center for our carbon neutrality initiatives, this committee drafts company-wide policies and plans related to carbon neutrality. It also monitors the progress of these initiatives, leveraging co-creation with external third parties through industry-academia-government collaboration, and reports and submits these matters to the Board of Directors.





## Harmony with the Global Environment

### Action against Climate Change

#### Information disclosure in line with TCFD recommendations

The Tokai Carbon Group recognizes climate change as a critical management issue. In November 2021, our Board of Directors formally expressed its support for the Task Force on Climate-related Financial Disclosures (TCFD). To better understand the climate-related risks and opportunities for our Group, we conducted an initial scenario analysis—a requirement of the TCFD recommendations—to assess business impact in December 2020, followed by a review in May 2023. We continue to identify the impacts of climate change on our business and advance our mitigation efforts.

Covered businesses: Four main businesses that account for approximately 90% of our sales as of 2022 (Carbon Black, Fine Carbon, Smelting and Lining, and Graphite Electrodes)  
Time horizon: 2030 and 2050 (2040 is used when reference data for 2050 is unavailable)

Scenario*	Business	Risk/Opportunity factors	Risks/ Opportunities	Main initiatives
4°C	All four businesses	Suspension of production activities and supply chain disruptions due to increased typhoons, flooding, and torrential rains	Physical risks	Regular surveys of water risks at our production sites <a href="#">▶ Water Resources page (P. 39)</a>
1.5°C	All four businesses	Increased burden due to expanded introduction of carbon pricing	Transition risks	Initiatives to achieve carbon neutrality targets (conversion to low-environmental-impact fuels, utilization of renewable energy, expansion of recycled products, reuse of used tires, etc.) <a href="#">▶ Carbon Neutrality page (P. 38)</a>
1.5°C	All four businesses	Mandatory adoption of renewable energy (its usage is unavoidable)	Transition risks	Promote efficient procurement of renewable energy <a href="#">▶ Carbon Neutrality page (P. 38)</a>
1.5°C	All four businesses	<ul style="list-style-type: none"> <li>• Proliferation of technologies not using fossil fuel-derived raw materials</li> <li>• Increased demand for low-carbon products and shifting consumer mindset regarding fossil fuel-derived raw materials</li> </ul>	Transition risks	<ul style="list-style-type: none"> <li>• Utilization of non-fossil fuel raw materials in the Carbon Black business, and launching a joint technology project for recycling carbon black from used tires</li> <li>• Investigation for introducing CCS (carbon capture and storage) technology</li> <li>• Enhancement of added value in products by reducing CO<sub>2</sub> emissions during manufacturing</li> </ul> <a href="#">▶ Business Strategy page (P. 24 to 34)</a> <a href="#">▶ Carbon Neutrality page (P. 38)</a> <a href="#">▶ Realizing a circular economy (P. 39)</a>
1.5°C	Graphite Electrodes	Increasing advantages of electric arc furnaces	Opportunities	<ul style="list-style-type: none"> <li>• Pursuit of higher-quality graphite electrode manufacturing and ensure stable supply by capitalizing on increasing demand</li> </ul> <a href="#">▶ Business Strategy page (P. 24-34)</a>

\* 1.5°C scenario: Scenario in which necessary measures are enacted to limit temperature increase to 1.5°C above pre-Industrial Revolution levels (NZE, SDS, etc.)

4°C scenario: Scenario in which the average temperature rises by 4°C above pre-Industrial Revolution levels. It represents a scenario in which no economic measures or additional countermeasures are taken to address climate change (SPS, etc.)





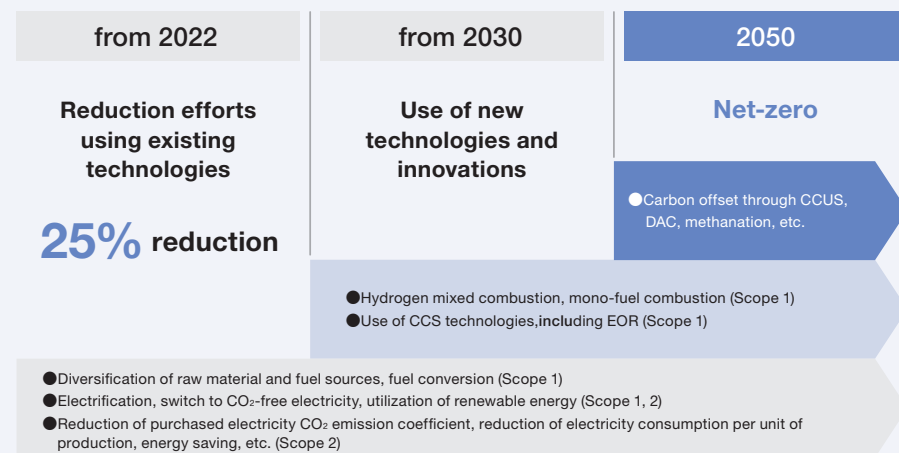
## Carbon Neutrality

### Tokai Carbon Group's CO<sub>2</sub> emissions reduction targets

Our Group aims to reduce CO<sub>2</sub> emissions by 25% (vs. 2018) by 2030, working towards achieving carbon neutrality by 2050.

### Roadmap to carbon neutrality

Based on the existing technologies, we aim to reduce 25% of CO<sub>2</sub> emissions by 2030. For raw materials, we are studying the use of plant-derived and other renewable resources. As for manufacturing processes, we will continue to transition and diversify fuels, shifting from fossil fuels to electrical energy and utilizing renewable energy, while also investing in energy-saving facilities. Furthermore, we aim for net zero emissions by 2050, leveraging new technologies and innovations. As the development of innovative technologies to reduce CO<sub>2</sub> emissions progresses globally, we will proactively introduce technologies that show promise for practical use.



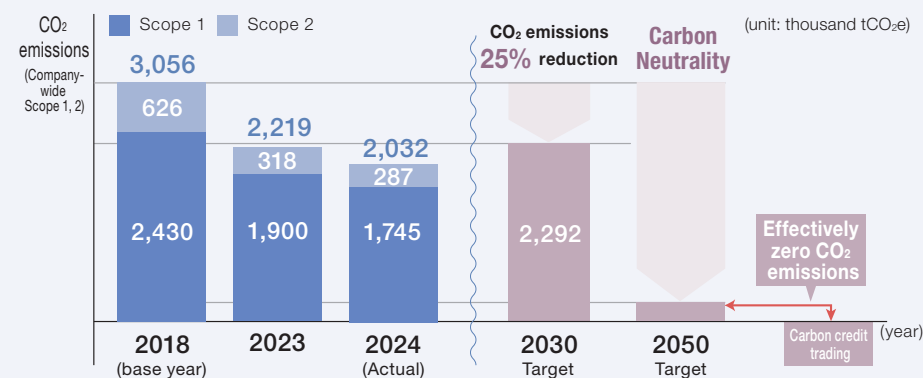
\* CCS: Carbon dioxide capture and storage

\* EOR: Enhanced oil recovery

\* CCUS: Carbon dioxide capture, utilization, and storage (technology for the utilization of separated and stored CO<sub>2</sub>)

\* DAC: Direct air capture (technology for the direct capture and use of atmospheric CO<sub>2</sub>)

### GHG emissions (Scope 1 and Scope 2) (consolidated)



\* Entire Group, Scope 1 and Scope 2

In 2024, the Tokai Carbon Group's GHG emissions were approximately 33% lower compared to 2018, primarily driven by the utilization of renewable energy and conversion to low-environmental-impact fuels.

In the Carbon Black business, we launched a joint technology project to regenerate carbon black from used tires. With financial support from the GI Fund\*, this project spans from research and development to PoC (proof of concept) and social implementation phases. We'll accelerate ongoing development, the introduction of innovative technologies, and collaborations with customers, business partners, and industry associations to achieve our goals.

\*GI Fund: Green Innovation Fund. Created by NEDO with funds totaling over 2 trillion JPY, this fund provides up to 10 years of continuous support for efforts by companies and other entities in achieving carbon neutrality.

	2018	2023	2024
GHG emissions (Scope 1 and 2) (thousand tCO <sub>2</sub> e)	3,056	2,219	2,032
Scope 1 (thousand tCO <sub>2</sub> e)	2,430	1,900	1,745
Scope 2 (thousand tCO <sub>2</sub> e)	626	318	287
Compared to base year	-	27% reduction	33% reduction

\*Scope 1: Direct emissions of GHGs from business operators

Scope 2: Indirect emissions of GHGs associated with the use of electricity, heat, and steam supplied by other companies



Water Resources

Water is indispensable for Tokai Carbon’s operations and a vital resource for the communities where our plants are located. We are promoting efficient use of water companywide, through water recycling and manufacturing process improvements.

Targets and performance

We are working to reduce water consumption by clearly identifying the amount of water required for production and reducing the excess use of water.

	KPI	Actual	Boundary
2024	Water consumption at or lower than the level of 2021 (9 million m <sup>3</sup> /year)	8.02 million m <sup>3</sup>	Consolidated (Non-consolidated and principal Group companies in Japan and overseas)
2025	Water consumption of 8.9 million m <sup>3</sup> /year or lower (1% reduction in consumption compared to 2021)	-	

Reduction initiatives at sites

Business	Sites	Initiatives
Graphite Electrodes	Domestic productions sites	Adjustment of industrial water intake
	Overseas production sites	Circulation and reuse of cooling water in the graphitization process
Carbon Black	Overseas production sites	Water leakage prevention measures
Smelting and Lining	Overseas production sites	Optimizing the amount of cooling water used at each production facility

Water risk and assessment

We utilize WRI Aqueduct to identify production sites facing water stress. In 2025, we conducted a survey of 44 production sites<sup>(1)</sup> across the Tokai Carbon group, both domestically and internationally. Among these, at the four sites<sup>(2)</sup> identified as having high water stress, we performed detailed investigations into past flood and drought occurrences, as well as water usage, confirming they are at low risk.

<sup>1</sup> As of January 2025. Includes laboratories.

<sup>2</sup> Sites where the overall water risk, among the risk categories for the chemical industry in WRI Aqueduct, was identified as “High” or “Extremely High”.

Realizing circular economy

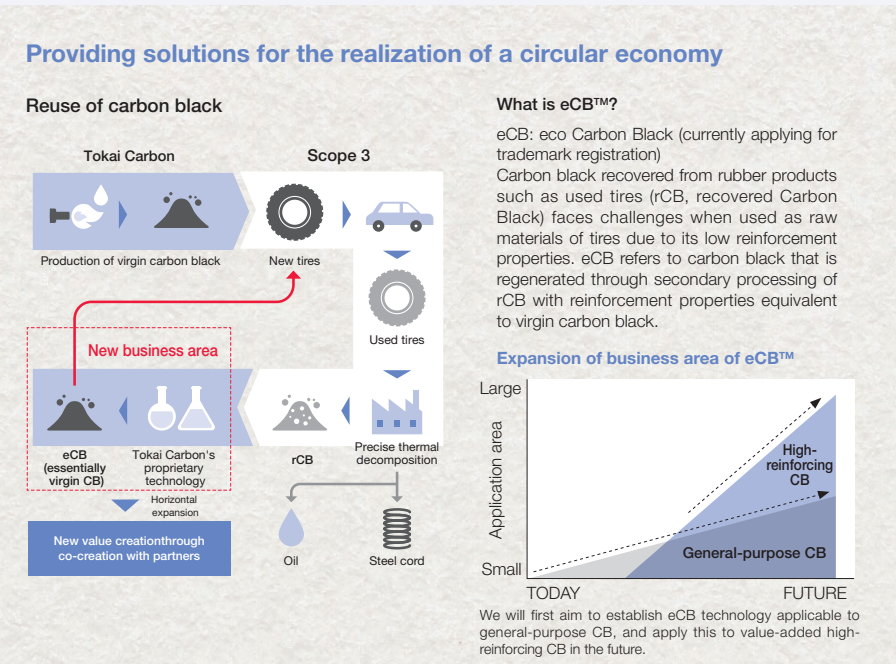
To make effective use of limited resources, we are working to reduce and recycle industrial wastes and to reduce our final disposal tonnage. We will also contribute to realizing a circular economy through the use of sustainable raw materials and product recycling.

Reduction of industrial wastes

We’re focused on reducing and avoiding industrial waste generation, thoroughly sorting waste, and promoting waste recycling to boost our recycling rate.

	KPI	Actual	Boundary
2024	Recycling rate 50% or higher*	Recycling rate 58.5%	Consolidated (Non-consolidated and principal Group companies in Japan and overseas)
2025	Recycling rate 51% or higher	-	

\* Recycling rate (%) = Recycling weight (weight of recycled waste) / Weight of generated waste x 100







## Biodiversity

The Tokai Carbon Group recognizes global environment preservation as one of its critical management priorities. In accordance with the “Environmental Philosophy” and “Environmental Policy” shared across our Group, we strive for harmony between our corporate activities and the environment by considering the impacts of our operations on ecosystems and biodiversity, working toward the realization of a sustainable society.



Tokai Carbon Group Biodiversity Policy

<https://www.tokaicarbon.co.jp/en/sustainability/biodiversity.html>

### Information disclosure in line with TNFD (Task Force on Climate-related Financial Disclosure) recommendations

Having historically upheld “Harmony with the global environment” as one of our materialities, we have focused on reducing greenhouse gas emissions and water consumption, minimizing waste, and cutting various pollutants. In light of the TNFD Final Recommendations version 1.0 published in September 2023, we have reorganized our initiatives to align with TNFD’s disclosure recommendations.

### Strategies for natural capital and biodiversity

In order to understand the dependence and impact on natural capital and biodiversity in our business, we conducted an analysis in accordance with the approach proposed by TNFD.

#### 1. Selection of the scope of analysis

We evaluated the degree of dependence and impact on natural capital and biodiversity of each business using the natural risk assessment tool (ENCORE) and confirmed that the Carbon Black business had a relatively high degree of dependence and impact. Additionally our value chain was found to have high dependency and impact on ecosystem services related to water resources.

#### 2. Identification of dependencies, impacts, risks, and opportunities

We identified two Carbon Black business production sites as priority areas requiring significant consideration for biodiversity. Following the approach advocated by TNFD, we analyzed the dependencies, impacts, risks, opportunities, and countermeasures related to the manufacturing process of this business in these areas. The results of this analysis are presented in the table on the top right.

#### 3. Countermeasures

To address risks, we will avoid and reduce the negative impacts of our business activities on biodiversity by reducing CO<sub>2</sub> emissions, water consumption, and pollutant emissions.

Results from the analysis of dependencies and impacts on natural capital and of risks and opportunities related to natural capital

<b>Dependencies</b>	Carbon black manufacturing and cooling processes consume a large amount of water, making the business dependent on water resources
<b>Impacts</b>	Beyond greenhouse gas emissions, the carbon black business (in-house operations) may have an affect on nature through discharge of wastewater, waste, and chemical substances generated in the manufacturing process, potentially leading to air, water, and soil pollution.

<b>Risks</b>	<b>Response (opportunity)</b>
<ul style="list-style-type: none"> <li>Increased risk of natural disasters due to deterioration of the natural environment</li> <li>Physical risks associated with water resources, such as water shortage and water pollution</li> <li>Risk of worsening reputation and litigation from communities and stakeholders if plant operations degrade the natural environment surrounding the plant</li> <li>Risk that tighter laws and regulations related to nature will affect plant operations</li> </ul>	<ul style="list-style-type: none"> <li>Reduction of CO<sub>2</sub> emissions</li> <li>Reduction of water consumption and promotion of recycling</li> <li>Reduction of NO<sub>x</sub>, SO<sub>x</sub> and VOC emissions</li> <li>Promotion of industrial waste recycling</li> <li>Development of low-environmental-impact products</li> </ul>

### Examples of ecosystem conservation activities

Our business sites participate in a variety of activities aimed at contributing to the conservation of local ecosystems.



**Ecosystem workshop for elementary school students (Tokai COBEX Group)**

We held a workshop to help children understand the importance of ecosystems and raise their awareness of environmental protection.



**Satoyama conservation project through extermination of alien species (Shonan Plant)**

We contribute to the conservation of the ecosystem by participating in activities aimed at controlling invasive species to protect the Satoyama (undeveloped woodland near populated area) ecosystem.



**Water conservation forestation activities (Hofu Plant)**

We participate in the “Water Protection Forest Creation Activity” organized by the Yamaguchi Prefecture’s Agriculture, Forestry and Fisheries Department. We contribute to the conservation of water resources by maintaining forests, which are the source of industrial water, indispensable to our corporate activities.



## Contributing to Society through Business

### Providing Safe and Secure Products

#### Basic ideas and characteristics of our business and customers

Our Group operate as a B2B materials manufacturer, providing a wide range of essential raw materials, components, and products used in manufacturing processes for various industries and daily life.

Our products are used in a wide range of customer industries and business types, including automotive, steel, electronic components, agricultural and industrial machinery, and lithium-ion batteries sectors. In addition, our Group operates not only in Japan but also in Asia, North America, and Europe, with 80% of our sales generated overseas.

#### Plant decentralization and localized production

Our Group, initially focused on production in Japan, began expanding its manufacturing bases towards outside of Japan in the 1990s, opening a carbon black plant in China in 2004, acquiring the German graphite electrode manufacturer TOKAI ERFTCARBON GmbH in 2005, and acquiring the Canadian carbon black manufacturer Cancarb Limited in 2014. In 2017 and 2018, we acquired manufacturing sites in the United States, one of the world's leading markets for our Graphite Electrodes and Carbon Black businesses. Through this, we solidified our presence as a global player and built a robust system to stably supply high-quality products.

#### Raw material procurement

For both carbon black and graphite electrodes, the number of suppliers capable of providing high-quality raw materials is limited. Therefore, we need to build close relationships with key suppliers to ensure a stable raw material procurement system.

Supplies of both carbon black feedstock oil and needle coke (the primary raw material for graphite electrodes), are presently tight. For carbon black feedstock oil, we select suppliers based on a balance of required volume, price, and product types.

For needle coke, each of our production sites currently conduct procurement locally. To ensure stable procurement, however, we are considering a centralized purchasing in

the future to establish an optimal group-wide procurement system. We hold significant market share in many products, including carbon black and graphite electrodes, which are essential components for our customers' daily production activities. Accordingly, we recognize that continuing the stable supply of high-quality products is our fundamental responsibilities. As a company integrated into our customers' supply chains, we will continuously strive to comply with various laws, regulations, and social norms, and to reduce the environmental impacts of our manufacturing processes.

#### Quality management

To provide products satisfactory for our customers, the Group strives for thorough quality control from the development phase onward, through the processes of raw materials procurement, manufacturing, logistics, and sales. We conduct inspections under strict standards at each stage, from raw material and auxiliary material acceptance to every manufacturing step and final shipment. By consistently providing safe and reliable products, we aim to strengthen our "Ties of Reliability" with our customers. All of our manufacturing sites in Japan have obtained certification for the ISO 9001 international quality standard as a foundation for quality control. Our business divisions and operational sites have all established quality management systems conforming to ISO 9001 and engage in activities to continuously improve customer satisfaction. Under this framework, we repeatedly apply the PDCA (Plan-Do-Check-Action) cycle to each process daily, ensuring we craft products that meet customer expectations. Furthermore, our business divisions and operational sites collaborate closely on quality management, regularly evaluating the effectiveness of our quality management systems and exchanging feedback.

#### Pursuit of customer satisfaction

We work tirelessly on technology development to enhance product functionality and environmental characteristics, yet customer demands for our products are becoming increasingly sophisticated and diverse each year. To accommodate individual needs not readily met through existing products and technologies, we will undertake joint research and development together with customers. By deeply understanding their products and businesses and, by always pursuing the potential for materials capable of innovating the industry, we aim to meet customers' expectations and further earn their satisfaction.





## Supply Chain Management

### Basic approach to CSR procurement

Our Group adheres to a basic philosophy of fostering “Ties of Reliability” with shareholders, customers, business partners, local communities, employees, and other stakeholders through our corporate activities. To maintain this trust and ensure sustainable business operations, we recognize the necessity of directly addressing global environmental and social challenges as a responsible entity.

Such initiatives cannot be brought to completion through the efforts of our Group alone. Recognizing the critical importance of the understanding and cooperation of our suppliers, including those upstream in the supply chain, we formulated the Tokai Carbon Group Procurement Policy.

To make this policy known to all of our suppliers, we post it online as noted below. Through this procurement policy, our Group and our suppliers will together contribute to the realization of a sustainable society.



#### Tokai Carbon Group Procurement Policy

[https://www.tokaicarbon.co.jp/en/sustainability/pdf/pdf\\_procurement.pdf?20240105](https://www.tokaicarbon.co.jp/en/sustainability/pdf/pdf_procurement.pdf?20240105)

### Implementation of CSR procurement surveys toward our business partners

Our basic philosophy of “Ties of Reliability” refers to the building of relationships of trust between our Company and stakeholders, including our business partners. With Group operations and raw material sourcing locations worldwide, we believe addressing social challenges across the entire supply chain is crucial for fostering these stakeholder relationships.

We ask new and key business partners to endorse our Group Procurement Policy, and complete a CSR Procurement Survey to verify their compliance. This survey uses the UN Global Compact’s CSR Procurement Self-Assessment Tool and comprehensively covers anti-corruption measures, including bribery, to ensure fair business practices.



#### Tokai Carbon Group Implementation of CSR procurement survey for our business partners

<https://www.tokaicarbon.co.jp/en/sustainability/procurement.html>

### The Tokai Carbon Group Basic Policy on Procurement

- 1 Partnership
- 2 QCD and fair / equitable evaluation and selection
- 3 Compliance
- 4 Respect for human rights
- 5 Coexistence with the global environment, the international and local communities

### Guidelines to Share with Our Suppliers

- 1 Conducting business with integrity and fairness
- 2 Respect for human rights and safe working environments
- 3 Initiatives for global environmental conservation; coexistence with local communities
- 4 Appropriate disclosure of corporate information
- 5 Protection of the Company assets and information



## Respect for Human Rights

### Our basic approach to human rights

At Tokai Carbon, we believe that consideration for human rights is vital to realizing our basic philosophy of “Ties of Reliability”.

We fully support the Universal Declaration of Human Rights, which sets forth “a common standard of achievement for all peoples and all nations” to respect and secure human rights and freedoms.

### Global policy on human rights

To fulfill our corporate responsibilities regarding respect for human rights, we will engage in business activities under high ethical standards, based on the United Nations Guiding Principles on Business and Human Rights. Drawing on such international human rights treaties, in July 2020 we established the Tokai Carbon Group Global Policy on Human Rights. Under this global policy, the Group will act as one to further advance our efforts aimed at respect for human rights. As our structure for doing so, the Tokai Carbon Group Human Rights Promotion Committee plays a central role in promoting this global policy and our approach to respect for human rights.

We recognize that children are particularly vulnerable to human rights violations and requires special consideration. Therefore, we support the Children’s Rights and Business Principles. We are committed to avoid human rights infringement on children in our business activities and engage in social contribution activities for the realization of their rights.

### Items in the Tokai Carbon Group Global Policy on Human Rights

1	Compliance with laws and regulations
2	Prohibition of discrimination
3	Prevention of child and slave labor
4	Support for basic labor rights
5	Reduction of excessive working hours and assurance of wage-related rights
6	Health and safety standards
7	Prohibition of harassment
8	Respect for privacy
9	Prevention and mitigation of negative impacts on human rights
10	Response to human rights violations



Tokai Carbon Group Global Policy on Human Rights

[https://www.tokaicarbon.co.jp/en/sustainability/pdf/human\\_rights.pdf?20240105](https://www.tokaicarbon.co.jp/en/sustainability/pdf/human_rights.pdf?20240105)

### Human rights due diligence

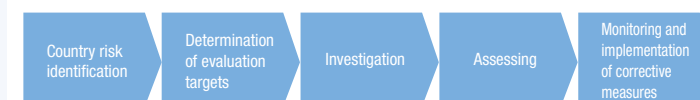
Our Group conducts human rights due diligence to ensure respect for human rights in our business activities. We identify and evaluate the potential human rights risks that may occur throughout the value chain and human rights issues peculiar to our business, and strive to prevent and rectify them. We will continue to identify these issues on the basis of engagement with our employees, suppliers, business partners, and other stakeholders.

### Our human rights due diligence process

Key items in our human rights risk survey include prohibition of discrimination, prohibition of forced labor and child labor, respecting freedom of association and rights to collective bargaining, ensuring appropriate working hours and wages, and upholding occupational health and safety.

In FY2020, we investigated country risks at the business sites of Tokai Carbon and Group companies to identify core human rights issues to be addressed at each site. Since FY2020, we have conducted human rights impact surveys for sites of Tokai Carbon and principal Group companies in Japan, and added surveys for principal overseas subsidiaries in FY2023. These assessments verify human rights and labor management systems, whistleblowing procedures, and the absence of legal violations at each site. For any areas requiring further investigation, we conducted detailed inquiries. We confirmed that no significant incidents constituting human rights violations occurred at any of the assessed sites during the four-year period from 2020 to 2023.

### Human rights due diligence process







## Strengthening Management Foundation

### Human Resources Strategy

To achieve our vision for 2030, we believe in the importance of securing and nurturing diverse talent and creating an environment in which employees can develop their talent through friendly competition.

As a first step toward human capital management, in 2023 the Tokai Carbon Group formulated policies on human resources development and on improvement of our internal environment. Under these policy, we develop and implement various HR initiatives to help each employee maximize their individual capabilities.

#### Human resources development policy

Our Group's corporate philosophy is "Ties of Reliability", and our action principles are "Integrity," "Innovation," "Challenge," "Co-creation," and "Agility". Our Group will recruit individuals who resonate with these principles. In an era of accelerating change, we will nurture talent capable of contributing to a sustainable society by actively collaborating with colleagues both inside and outside the Company, embracing diverse values and backgrounds, and boldly taking on innovative challenges with agility.

#### Internal environment improvement policy

Our Group will foster a broad-minded, open organization and culture where employees holding diverse values and backgrounds can grow through friendly competition and grow toward our long-term vision of "Contribute to the realization of a sustainable society through advanced materials and solutions."

While advancing work style reform and achieving a suitable personnel system and competitive employee treatment that attracts diverse human resources, to support employees' growth, we have also readied varied training programs matched to employees' career stages, characteristics, and aspirations. We treat the human rights of employees with utmost respect and do not tolerate harassment. Based on the Tokai Carbon Health and Productivity Management Declaration, we strive for management that places importance on the health of employees and their families, and support asset building through our pension and employee stock ownership programs.

### Talent Development

#### Education and training

Our varied education and training include specialized training for selected employees, tier-specific training that includes new employee training, and theme-based training (such as digital literacy). To support individuals' self-study, we additionally provide programs offering correspondence education and incentives for obtaining public qualifications.

The training hours per employee for specialized training and tier-specific training in 2024 was 16 hours/year.

We focus on developing next-generation management candidates through selective management training programs.

We conduct "Executive management training" and "Next-generation leader training" to secure our future executive candidates. "Executive Management Training" aims to develop the ability to formulate and execute business strategies from a management perspective. For "Next-Generation Leader Training," we support attendance at business schools with the goal of mastering logical thinking, marketing, finance, and leadership skills.

After completing the training, trainees present their results to the management team.

	KPI	Boundary
2025	Effectively implement training - Total training hours planned by head office (New-hire training / specialist training)	Non-consolidated and principal Group companies in Japan

#### Providing opportunities for growth

We are encouraging communication between supervisors and team members as part of our efforts to enhance employee growth and engagement. With opportunities such as career development interviews and personnel assessment interviews, supervisors provide the appropriate support to team members in a timely manner for setting goals and designing their career paths—these efforts all encourage personal growth.

To cultivate future management talent and invigorate our organization, we regularly hold Human Resources Planning Meetings. These meetings, comprised of executive-level representatives from each business division and members of the HR department, facilitate the strategic placement of talent across divisions. During these sessions, we discuss succession planning for each department, as well as development and career plans for our younger and mid-career employees.



## Promotion of Diversity

### Promoting active participation by women

Based on the Act on Promotion of Women's Participation and Advancement in the Workplace, we formulated a general employer action plan in 2025. Over the five-year period starting April 2025, our goals are to increase the percentage of women in managerial positions to 7.0% or more and reduce the average monthly overtime hours for all full-time employees to 25 hours or less for each fiscal year during the period of the plan. To achieve these goals, we will focus on increasing the proportion of women among female new graduates hired for career-track positions to at least 30%, and creating a comfortable workplace environment for employees who need to raise children or provide care for family members, etc.

	KPI	Actual	Boundary
2024	Increase the ratio of female employees in managerial positions from 2.8% in 2021 to 5.6% or higher by 2024	3.8%	Non-consolidated
2025	Increase the ratio of female employees in managerial positions from 3.8% in 2024 to 5.6% or higher by 2027	-	Non-consolidated
	KPI	Actual	Boundary
2024	Percentage of new female graduates hired for career-track positions: 30% (non-consolidated)	33%	Non-consolidated
2025	Percentage of new female graduates hired for career-track positions: 30% (non-consolidated)	-	Non-consolidated

### Utilization of senior talent

We have established a re-employment contract system enabling motivated and skilled senior employees to continue working after mandatory retirement by age. In 2024, to maintain and boost the motivation of our senior talent, we expanded this system by introducing a Premium Re-employment Contract System. This new system, launched into operation in 2025, enables employees to continue working under conditions equivalent to those before retirement, based on their performance and aspirations.

### Expansion of mid-career recruitment

We are expanding mid-career recruitment efforts to invigorate our organization, strengthen expertise and secure immediate contributors for business promotion. By actively bringing in talent with external experience and advanced specialized knowledge, we aim to introduce new perspectives and ideas, thereby enhancing the overall capabilities of our organization. Furthermore, hiring immediate contributors in a rapidly changing business environment will accelerate our business growth.

## Supportive Working Environment

### Enhancing childcare/nursing care leave systems, etc.

To support our employees for balancing childcare and work, we have introduced prenatal and postnatal leave and childcare leave systems that exceed legal standards.

The childcare leave system provides a maximum two-year leave after the birth of a child, employees may also work shortened hours up to the time their children complete the third grade of elementary school. These benefits exceed statutory standards. Nursing care leave provides for a total of 93 days per family.

For the acquisition of annual paid leave, in addition to planned acquisition of 5 or more days, we enhance flexibility through a half-day leave system and an expired leave accumulation system.

	KPI	Boundary
2025	Establish a supportive working environment for employees raising children or providing nursing care for family members	Non-consolidated

### Work-from-home and flextime systems

We have introduced work-from-home and flextime systems to enable employees to work flexibly without being constrained by time or location. Both of these systems are gradually being made available to a wider range of workplaces to foster a balance between work and family life.

### Improvement of workplace environments

To improve “workplace environments,” an area identified as challenging in our employee engagement surveys, we are implementing capital investments for workplace environment improvements at our domestic sites based on their specific requests.



## Enhancement of employee engagement

Improving employee engagement not only boosts corporate productivity, enhances customer satisfaction, and reduces turnover rates, but also enriches the lives of individual employees by increasing job satisfaction and improving work-life balance. Since 2023, Tokai Carbon has conducted annual employee engagement surveys aimed at all employees and undertake ongoing monitoring and post-survey improvement actions within all organizations. For the 2024 survey, we received responses from 94% of employees. While “(Supervisor) Support Behavior” was identified as a strength, “Facility Environment” and “System and Treatment” remained challenging areas, consistent with the previous year’s survey. We are advancing efforts to create an environment where employees can thrive, including capital investments for workplace environment improvements based on the requests from respective sites, and the introduction of a system to review the treatment of re-employed contract employees (in 2024). As for post-survey improvement actions in respective organizations, we are strengthening communication within workplaces and are drafting and executing plans at the department, division, business division, and workplace (plant and laboratory) levels. We also share positive examples of improvement activities at organizations on our internal portal site.

	KPI	Boundary
2025	Engagement score improvement (vs. previous score)	Non-consolidated

Non-financial data (Society) is posted in the Data section (see P. 63)

## Occupational Health and Safety

### Policy and promotion structure

As its global safety policy, the Group has adopted “Safety is a critical core value shared by the entire Tokai Carbon Group. We aim to provide a safe working environment for all people working in our plants by eliminating hazards and reducing risks.”

	KPI	Actual	Boundary
2024	Frequency rate 1.20 or lower	1.11	Consolidated (Non-consolidated and principal Group companies in Japan and overseas)
2025	Frequency rate 1.10 or lower	-	

### Risk assessment

In order to eliminate hazards and reduce risks, the Group promotes the implementation of risk assessments and countermeasures. In the risk assessment, we evaluate the risks leading to injuries and those affecting health, clarify the priorities for the identified risks, and improve the work environment.

When installing new production equipment or refurbishing existing facilities, we conduct risk assessments from the equipment design stage. If high risks are identified, we implement measures to reduce them in advance. In response to work-related injuries (occupational accidents), poor physical conditions, and serious incidents, we first grasp the situation through on-site verification, thoroughly investigate the root cause through the five whys analysis, formulate measures to prevent recurrence, and verify their effectiveness. Moreover, in order to prevent similar accidents, we share information on the incident details and countermeasures with all business sites.

### Emergency response training

Tokai Carbon has formulated an Emergency Response Manual to prepare for potential plant emergencies and conduct disaster prevention drills at regular intervals. These drills simulate major earthquakes, tsunamis, fires and other plant-specific emergencies, covering activities such as firefighting, rescue operations, evacuation drills, oil spill response measures.



▲ Oil fence deployment for oil spill prevention (Ishinomaki Plant)



Corporate Governance



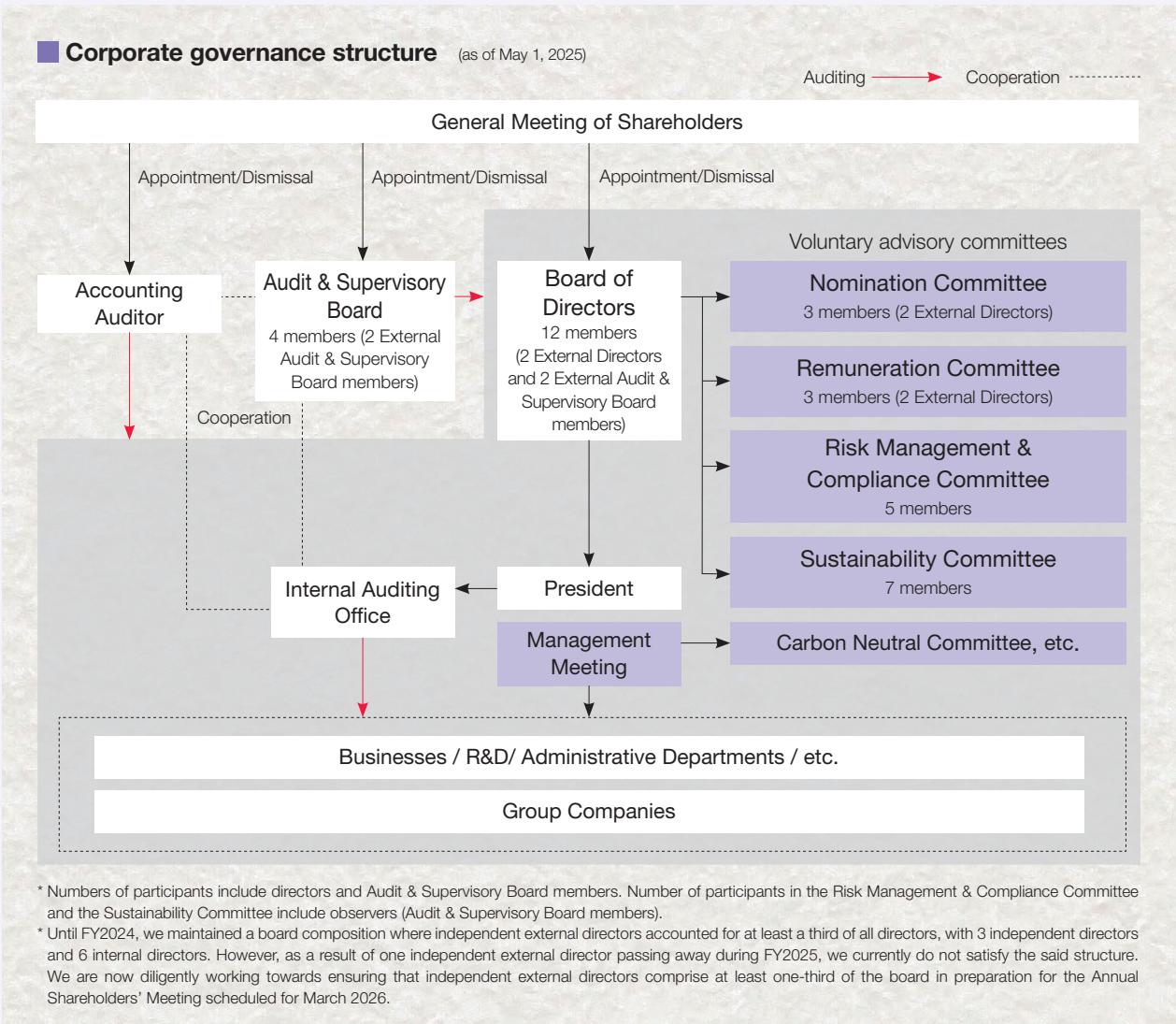
Tokai Carbon Group  
Corporate Governance Report



Tokai Carbon recognizes the enhancement of medium- to long-term corporate value as our most important management objective. To achieve this, it is vital that we meet the expectations of all our stakeholders, including customers, shareholders, and to build strong relationships. Under that belief, we embrace the basic philosophy “Ties of Reliability.” Based on the concepts of our Action Guidelines and our Global Code of Conduct, we are working to build an effective corporate governance structure.

Governance Quick Reference Table (as of May 1, 2025)

Organizational structure design	Company with Accounting Auditors
Directors	8 (including 2 External Directors)
Audit & Supervisory Board members	4 (including 2 External Audit & Supervisory Board members)
Term of office of directors	1 year
Adoption of executive officer system	Yes
Number of Board of Directors meetings (fiscal year ended December 2024)	18 times
Average attendance rate at Board of Directors meetings (fiscal year ended December 2024)	100%
Number of Audit & Supervisory Board meetings (fiscal year ended December 2024)	19 times
Average attendance rate at Audit & Supervisory Board meetings (fiscal year ended December 2024)	100%
Advisory committees to the Board of Directors (voluntary committees)	Nomination Committee, Remuneration Committee, Risk Management & Compliance Committee, Sustainability Committee
Accounting Auditor	KPMG AZSA LLC







## Evaluations of the Effectiveness of the Board of Directors

### Evaluation method

Method	Following signed questionnaires targeting all directors and Audit & Supervisory Board members, individual hearings are conducted with external directors to supplement the questionnaire.
	Following Board of Directors discussions of questionnaire results, evaluations of effectiveness and future issues are determined.
Evaluation items	Structure of the Board of Directors, operation of the Board of Directors, provision of information to external officers, improvements from the previous fiscal year, overall evaluation, open-ended comments
Evaluation period	January 2024 to December 2024

### Overview of findings in 2024

In 2016, Tokai Carbon fundamentally strengthened its board-centric governance system by establishing new committees, including the Nomination Committee, Remuneration Committee, Management Meeting, and Risk Management & Compliance Committee. This has resulted in significant improvements in a number of aspects, a finding confirmed through annual evaluations of the effectiveness of the Board of Directors. A notable feature is the active attendance of all independent external directors at key meetings other than meetings of the Board of Directors, deepening their understanding of significant subjects. Effectiveness evaluations have reported that external directors' neutral and objective comments contribute significantly to enhancing the supervision function of the Board of Directors. Our current governance structure is now largely well-established and we are properly maintaining our structure's initial achievements. We are also working continuously to strengthen the system. For instance, in 2024, we focused on enhancing the integration of sustainability with our management strategy.

### Matters discussed by the Board of Directors in 2024

Subject category	Topics
Governance, risk management, management of subsidiaries 37.7%	Analysis and evaluation of the effectiveness of the Board of Directors
	Reports on financing, investments, and market risk management
	Internal control system basic policy, status of initiatives, internal audit planning, reporting
	Risk Management & Compliance Committee reports
Human resources and organization 17.4%	Personnel matters of directors and officers
	Reorganization, regulatory revisions

Accounting and finance 17.4%	Monthly financial results, earnings bulletins, securities reports
Management strategy, sustainability 24.6%	Annual budgets, Medium-term Management Plan formulation, progress reports
	Business portfolio evaluation and analysis, verification of validity of cross shareholdings
	Sustainability Committee, Carbon Neutral Committee reports
	Restructuring of the graphite electrode production system
	Establishment of biodiversity policy, TNFD-related disclosure

### Response to issues verified in the previous year

Among the issues identified in the previous year, the linkage of sustainability (including action for carbon neutrality) to management strategy was deliberated more deeply by the Board of Directors, based on reports and recommendations by the Sustainability Committee concerning progress management of materialities and KPIs, enhanced disclosure of sustainability information, response to the findings of the employee engagement survey, and actions for biodiversity (TNFD). These deliberations were reflected in disclosures.

Regarding more high-level themes such as the enhancement of business portfolio management, we have developed a structure where the economic spread and economic profit for each business division are reported to the Board of Directors every quarter. Based on this information, we clarify businesses requiring improvement and those targeted for further growth. Businesses needing improvement are subjected to structural reform, and for growth-oriented businesses, we prioritize investments. We perform analysis and evaluation of our business portfolio with full attention to achieving management mindful of capital costs and share prices.

### Issues in 2025

For 2025, we will continue to focus on high level initiatives such as the integration of sustainability (including actions aimed at achieving carbon neutrality) to management strategy and the enhancement of business portfolio management. For the former issue, key priorities for the Board of Directors in 2025 are the clarification of the roadmap for achieving our carbon neutrality interim target of a 25% reduction by 2030 and to advance initiatives aimed at improving employee engagement, and for the latter issue, solidification of directions for structural reform in Graphite Electrodes and Smelting and Lining businesses.

## Message from the Chair of the Board of Directors

### Reviewing Board of Directors' agendas in line with changing times and expansion of the Company's scale

#### Ensuring timely, comprehensive sharing of crucial information

From the standpoint of enhancing the efficacy of the Board of Directors, the importance of selecting effective Board agendas cannot be overstated. Since I became Chair of the Board in February 2015, we have revised the Board of Directors' agenda reporting criteria three times (in 2016, 2019, and 2024), counting only the major overhauls. During this period, the Company has expanded significantly in size, and the demands of the times have changed as well. Under these circumstances, while paying attention to the Board of Directors' supervisory functions, we have continuously revised the Board agenda. For example, we've progressively added reports from committees such as the Risk Management & Compliance Committee, Sustainability Committee, and Carbon Neutral Committee. We also now include reports on business portfolio evaluation and analysis, as well as status updates and evaluations concerning our initiatives to realize management conscious of cost of capital and stock price, in response to requests from the Tokyo Stock Exchange. Regardless of whether the news is good or bad, we strive to ensure that important information is shared in a timely manner.

#### Steps in Strengthening Governance

2016	2017	2018	2019	2020	2021	2022	2023	2024
<ul style="list-style-type: none"> <li>● Establishment of the Nomination Committee, Remuneration Committee, and Risk Management &amp; Compliance Committee as voluntary advisory committees to the Board of Directors</li> <li>● Establishment of the Management Meeting</li> <li>● Meeting of the Board of Directors on a monthly basis and clarification of agenda items</li> <li>● Appointment of multiple independent external directors</li> </ul>	<ul style="list-style-type: none"> <li>● Start of annual evaluations of the effectiveness of the Board of Directors</li> </ul>	<ul style="list-style-type: none"> <li>● Start of building a foundation for ESG management</li> <li>● Establishment of independence standards for external directors</li> <li>● Introduction of internal reporting system in the Group</li> </ul>	<ul style="list-style-type: none"> <li>● Prepared and launched global finance and taxation management structure</li> <li>● Establishment of Tokai Carbon Group Procurement Policy</li> </ul>	<ul style="list-style-type: none"> <li>● Establishment of Tokai Carbon Group Global Policy on Human Rights</li> </ul>	<ul style="list-style-type: none"> <li>● Establishment of Tokai Carbon Group Sustainability Policy</li> <li>● Ensured independent external directors constitute at least one-third of the Board, and appointment of female external directors</li> <li>● Establishment of Business Portfolio Management Strategy Policy</li> <li>● Disclosure of climate change risks and opportunities in accordance with TCFD Recommendations</li> <li>● Disclosure of skills matrix of the Board of Directors</li> </ul>	<ul style="list-style-type: none"> <li>● Establishment of the Sustainability Committee</li> <li>● Establishment of the Carbon Neutral Committee</li> <li>● Formulation of our long-term vision for 2030</li> <li>● Establishment of Global Code of Conduct</li> <li>● Commenced governance training for subsidiaries to strengthen group governance</li> </ul>	<ul style="list-style-type: none"> <li>● Linking officer remuneration to sustainability performance</li> <li>● Formulation of policy on human resources development, and policy on internal environment improvement</li> </ul>	<ul style="list-style-type: none"> <li>● Establishment of Tokai Carbon Group Biodiversity Policy</li> <li>● Information disclosure in line with TNFD recommendations</li> </ul>

#### Distribution of meeting agendas in advance to encourage proactive discussion

To ensure maximum effectiveness and efficiency during the limited time of Board of Directors meetings, we focus on improving meeting materials and distributing them in advance. This allows us to simplify explanations during the meeting, assuming participants already have a basic understanding of the content, thereby securing more time for deliberation. We recognize the especially high need for efficient meeting management at our Company, given that our external directors are also asked to attend weekly Management Meetings.

Our external directors actively speak their minds without much prompting from my side, and it is not uncommon to hear uncomfortable opinions – the kind that make you think, “Did they really just say that?” As Chair of the Board, beyond fostering an atmosphere where all participants feel comfortable speaking freely, I make sure to guide the meeting to a spirited discussion. This often means asking the presenting executive for more background or supplementary explanations when I sense our external directors are struggling to understand the details or context, and sometimes I'll even provide clarification myself, all to encourage everyone to bring out their thoughts.



Hajime Nagasaka  
Chair of the Board of Directors



## Officers' Skills Matrix

As of May 1, 2025

With the aim of realizing our long-term vision of “Contribute to the realization of a sustainable society through advanced materials and solutions” alongside Vision 2030, we have organized the knowledge and experience expected of directors and Audit & Supervisory Board members as follows, to enable the Board of Directors to exert appropriate decision-making and management supervision functions.

When appointing directors and Audit & Supervisory Board members, we seek to maximize the functions of the Board of Directors in light of the skills matrix.

		Knowledge and experience expected of Directors and Audit & Supervisory Board members									
		Gender	Term of office (years)	Corporate management	Finance and accounting	Legal affairs and risk management	Global business	Manufacturing, technology, and ICT	Sales and marketing	Personnel and HR development	ESG and sustainability
Directors	Hajime Nagasaka	Male	19	●			●		●	●	●
	Masafumi Tsuji	Male	8	●		●	●			●	●
	Katsuyuki Yamaguchi	Male	6					●	●		●
	Shunji Yamamoto	Male	6	●			●	●			
	Tatsuhiko Yamazaki	Male	2	●			●	●	●		
	Takashi Masaki	Male	1	●			●		●		
	Nobumitsu Kambayashi	Male	9	●		●	●		●	●	
	Mayumi Asada	Female	4			●				●	●
Audit & Supervisory Board members	Yuji Serizawa	Male	2			●	●				
	Kanji Sugihara	Male	1			●		●			
	Kaoru Ogashiwa	Male	5		●	●					
	Yoshinori Matsushima	Male	2		●	●					

## Reasons for selection of the knowledge and experience expected of directors and Audit &amp; Supervisory Board members

Knowledge and experience	Reason for selection
Corporate management	We consider extensive knowledge and experience involving comprehensive corporate and organizational management to be important in achieving medium to long-term enhancement of corporate value under an environment of high uncertainty.
Finance and accounting	We consider extensive knowledge and experience involving finance and accounting to be important in evaluating the growth and profitability of businesses, maintaining financial soundness, and achieving high capital efficiency.
Legal affairs and risk management	We consider extensive knowledge and experience involving legal affairs, risk management, and compliance to be important in accurately grasping varied risks in management and enacting appropriate countermeasures.
Global business	As approximately 80% of our sales is generated overseas, we consider extensive knowledge and experience involving overseas business and management to be important in successfully operating and expanding the overseas business of the Company.
Manufacturing, technology, and ICT	As a manufacturing company, we consider extensive knowledge and experience involving manufacturing technology and ICT to be important in stably creating high-quality products that meet the needs of the times.
Sales and marketing	We consider extensive knowledge and experience involving sales and marketing to be important in capturing the needs of diverse customers to globally expand sales of our products and in creating value that exceeds customers' expectations.
Personnel and HR development	We consider extensive knowledge and experience involving personnel affairs and human resource development to be important for maximizing the value of human capital, such as creating an environment in which diverse human resources can maximize their individual capabilities.
ESG and sustainability	We consider extensive knowledge and experience involving ESG and sustainability to be important in addressing global environmental issues such as climate change and in contributing to the realization of a sustainable society.

Overview of our executive remuneration programs

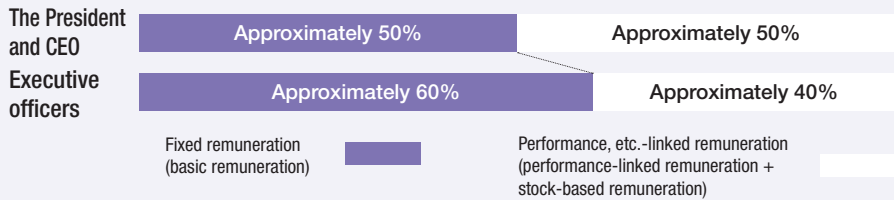
Tokai Carbon's executive remuneration consists of a fixed "basic remuneration", variable "performance-linked remuneration" and "stock-based remuneration", which fluctuate based on the achievement of performance targets. For directors and executive officers responsible for business execution, the proportion of "performance-linked remuneration" to "basic remuneration" increases with seniority, reflecting their level of responsibility and impact on our Company's performance. To ensure independence in determining individual compensation, the Board of Directors delegates this decision to the Remuneration Committee, where external directors constitute the majority. The Remuneration Committee conducts multi-faceted reviews, including alignment with the remuneration policy, ensuring that the Board of Directors deems the remuneration content to be appropriately determined. Remuneration for Audit & Supervisory Board members is determined through deliberations by themselves, within the remuneration limit approved at General Meeting of Shareholders.

Basic policy

Directors and Executive Officers (excluding external directors)	<p>Policy for the determination of remuneration for directors and executive officers is a matter for resolution by the Board of Directors. Amounts are set in line with the Company's performance and with individual performance and achievements, within the remuneration limit approved at General Meeting of Shareholders. The goal is to ensure that the officers responsible for the execution of business have a strong commitment to the achievement of high management targets and the maximization of medium- to long-term corporate value, while ensuring a standard that meets the following requirements.</p> <ul style="list-style-type: none"><li>● Remuneration to encourage officers' commitment to short-, medium-, and long-term management targets</li><li>● Remuneration at a level that motivates current and future officer candidates and is not inferior to the level of competitors</li><li>● Remuneration with the guarantee of transparency and rationality to ensure accountability toward officers, shareholders, and investors</li></ul>
External directors, Audit & Supervisory Board members	Basic remuneration only

Remuneration composition ratio

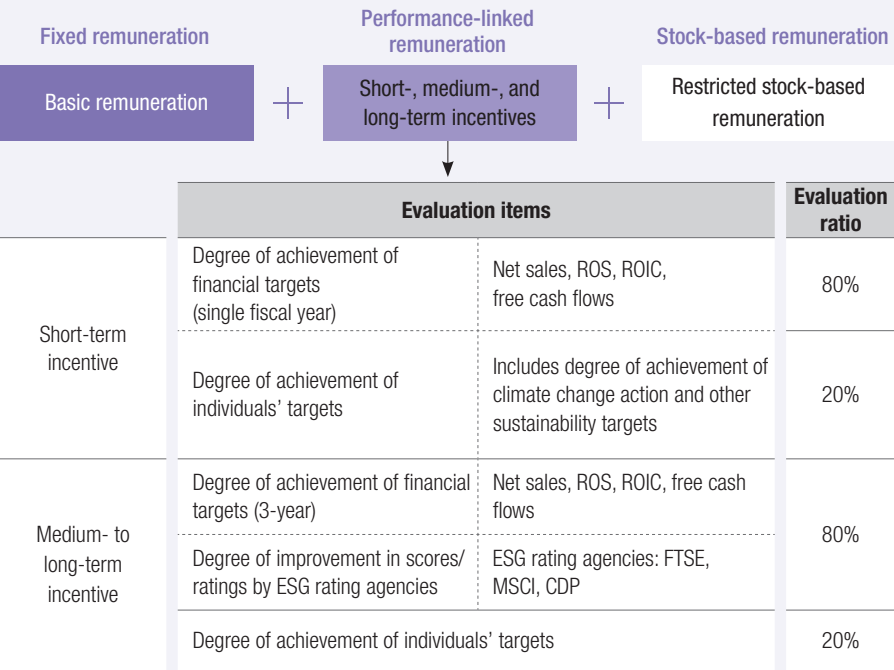
In position-specific remuneration composition ratio, the performance, etc.-linked compensation ratio (here meaning the ratio of performance-linked remuneration + stock-based remuneration) of the President and CEO is set to the highest level, at approximately 50%. That of executive officers, approximately 40%, declines in line with position.



Overview of remuneration elements

Type of remuneration		Overview
Fixed remuneration (basic remuneration)		Amount is determined from the base amount according to position, with assessment reflected
Performance-linked remuneration	Short-term incentive	The base amount is set according to position, and the amount of remuneration provided is determined within the range of 10% to 200% of the base amount according to financial target indicators and degree of achievement of individuals' targets (including sustainability targets)
	Medium- to long-term incentive	The base amount is set according to position, and the amount of remuneration provided is determined within the range of 10% to 200% of the base amount according to financial target indicators, degree of improvement in scores/ratings by ESG rating agencies, and degree of achievement of individuals' targets
Stock-based remuneration (Restricted stock-based remuneration)		Up to 100 million JPY per year in remuneration for the granting of restricted stock is paid as monetary claims, to provide incentive for the continuous enhancement of the Company's corporate value and to encourage the sharing of value with shareholders

Remuneration structure







## Compliance

We have established basic policies including our basic philosophy, Action Guidelines, and Global Code of Conduct. In accordance with these principles, we strive to comply with laws, regulations, and rules, and to engage in corporate activities with high ethical standards.

### Management structure

The Risk Management and Compliance Committee, an advisory body to the Board of Directors, discusses important matters concerning risk and compliance, such as Group-wide risk countermeasures. It also provides counsel to relevant departments and sections based on the outcomes of discussions, and provides the Board of Directors with reports on progress and suggestions for countermeasures and other matters.

We have also established a Global Code of Conduct that serves as a standard for the actions and decisions of all executives and employees in the execution of everyday work.

### Internal reporting system

We have introduced an internal reporting system for receiving reports from employees and other individuals who have learned of signs or acts of legal violations or fraud, including any linked to bribery or other corruption by executive officers or employees. We have established in-house contact points (Legal Affairs Department, Audit & Supervisory Board members) and external contact points (legal advisors) to receive reports or requests for advice by phone, fax, email, letter, or other means. Reports can be made anonymously. We have also readied a structure allowing us to act on reports from third parties, reports received in foreign languages, and reports received through channels other than the prescribed points of contact.

The Company's Guidelines on Handling Internal Reports clearly state that, apart from cases in which the system is deliberately misused, informants will not be dismissed or subjected to unfair treatment under this system, thereby ensuring the appropriate implementation of the system. The Legal Affairs Department Manager is responsible for conducting investigations into facts reported by informants, while strictly maintaining the confidentiality of informants.

When investigation reveals legal violations, etc., we enact measures for correction and for the prevention of occurrence, and impose disciplinary measures in accordance with employment regulations. We have also prepared mechanisms by which all employees and stakeholders can make reports with confidence through external

points of contact. We are working to increase awareness of this system through information in our Compliance Manual and internal rules and through means including in-house seminars, message boards, and newsletters.

### Prevention of corruption

Prevention of bribery and other corrupt behavior

Our Global Code of Conduct states that we will comply with relevant laws and regulations at home and abroad, and will engage in corporate activities aligned with social ethics and sound judgment. The code also clearly expresses that we will comply with international norms and relevant national laws and regulations concerning the prevention of corruption, and that we will engage in no corrupt acts involving the civil servants, government officials, or other parties of any country. Accordingly, we prohibit and strive to prevent acts of bribery, including the offering or provision of gain as consideration for favors, the requesting or acceptance of gain in the form of cash, excessive entertainment, services, etc., or other acts that could be viewed as bribery. We further prohibit employees from engaging in corrupt acts such as the embezzlement of company funds or complicity in money laundering. We provide no political donations.

Supervision of the Board of Directors with respect to corrupt acts

The Board of Directors oversees initiatives concerning compliance, including the prevention of bribery and other corrupt acts, and receives reports from the Risk Management & Compliance Committee.

### Education and training

We conduct continuous compliance training to raise compliance awareness among all employees.

In FY2024, we conducted e-learning-based training for all Tokai Carbon executives and employees, covering topics including prevention of insider trading and the appropriate use of social media. The attendance rate was 86.2%.

Our tier-specific training includes compliance training by in-house and external instructors for new employees and managers.

We also distribute compliance message videos internally and publish related articles in our in-house newsletter to raise compliance awareness among officers and employees.

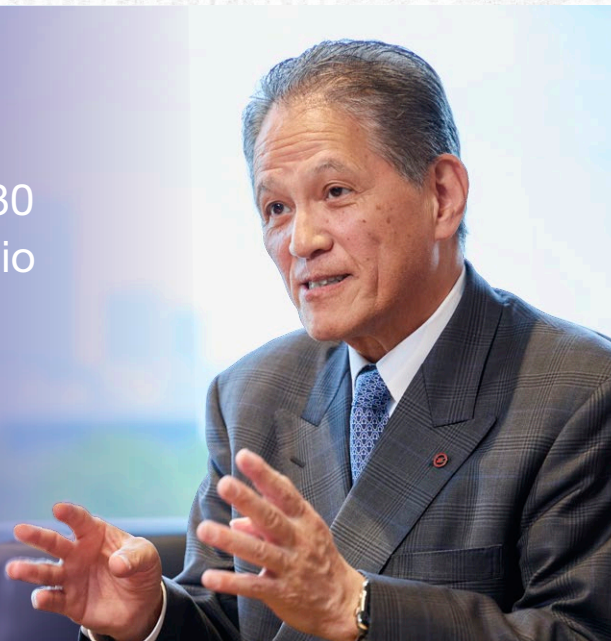


### Message from the External Director

## Aiming for the ideal state of 2030 and advancing business portfolio management

Nobumitsu Kambayashi  
External Director

Nobumitsu Kambayashi was appointed External Director of the Company in March 2016. Holding key positions at a major global heavy industry manufacturer for many years, he has wide-ranging knowledge and extensive experience in corporate management, legal affairs, sales and marketing, and human resource development.



### Attendance by external directors and Audit & Supervisory Board members in the Management Meeting to enhance the effectiveness of the Board of Directors

One of the most distinctive features designed to enhance the effectiveness of the Board of Directors is the external directors and Audit & Supervisory Board members attending the Management Meeting. The opportunity to verify the executive decision-making processes is highly informative for external directors. In 2024, all external officers achieved 100% attendance not only at Board of Directors' meetings but also at all weekly Management Meetings, which I believe is a rarity.

External officers often receive advance briefings on particularly important topics, allowing us to participate in discussions with a genuine grasp on the intentions behind the agenda. Furthermore, our meeting of the Board of Directors and the Management Meeting are now paperless and databased. This means all materials and minutes since the start of the current governance structure in 2016 are easily accessible on our mobile PCs, allowing us to review historical contexts and changes as needed before attending the Board meetings.

The Company has grown considerably since I took office in March 2016. Despite this expansion, we've actually seen a gradual decrease in the number of

proposals submitted to the Board of Directors, thanks to a review of our board approval criteria. Conversely, the number of reports from various committees has steadily increased. This indicates that we've built a system that allows the Board to more effectively exercise its supervisory function. Furthermore, we've put in place a system to track the follow-up status of instructions and directives issued during meetings. This ensures concrete actions, leaving no discussions as just "empty words", which significantly enhances the effectiveness of our meetings.

### Critical challenge; how to advance our business portfolio management

Urgent challenges at present are the structural reforms of Graphite Electrodes and Smelting and Lining businesses. While we anticipate certain degree of pain during these reforms, the key questions are: how do we rebuild these businesses? How do we strategically allocate management resources to the Carbon Black business, which is poised for stable growth alongside the automotive industry, and to the Fine Carbon and the Industrial Furnaces businesses, which show even greater growth potential with the expanding semiconductor-related businesses. Addressing these issues, and specifically how we tackle the sophistication of our overall business portfolio management, remains a challenge for the Board of Directors.

Addressing contemporary demands such as sustainability and carbon neutrality are also key topics. However, said demands can be surprisingly changeable, with shifts in direction not uncommon even within a span of few years. While we cannot ignore them, it is vital for us to solidify our own strategic focus because initiatives that don't enhance our corporate value can be meaningless. We are expected to tackle the matters in



earnest, but simply pursuing these goals blindly is not the answer, and the Board's approach to these matters is not an easy task. When it comes to energy issues, I have always been of the opinion: "Don't go it alone. Don't lead the pack. But don't get left behind," and I certainly hope that this remains the case.

In future board meetings, we will continue to prioritize discussions on fundamental strategic matters, such as business portfolio management and sustainability, and will pursue even deeper discussions than in the past.

### Initiatives for production system restructuring and engagement to enhancement corporate value

In July 2024, we announced the first phase of our Graphite Electrodes business structural reform: ceasing operations at our historic Shiga Plant and integrating domestic production into the Hofu Plant. I viewed the decision to restructure our production system in such way with great seriousness. While this move was necessary to regain business competitiveness amidst challenging supply-demand dynamics and an increasingly tough competitive landscape in the industry, it had a profound impact on our long-serving employees at the Shiga Plant. It's far more complex than simply saying "it couldn't be helped." However, the Company's commitment to accept all employees who wished to relocate to other plants, and the fact that more employees than anticipated chose to stay with us, was a significant relief.

In the area of human capital, discussions around initiatives to improve employee engagement have been impactful. While we may not be considered a leader in this area, having only started our engagement survey two years ago, I highly commend the company's commitment to address policies that involve significant costs in a

head-on and unwavering manner, such as improving employee compensation, utilizing senior talent, and enhancing working environments in our factories, even amidst a challenging business landscape. The hiring environment is becoming increasingly severe as the working population declines. However, strengthening our human capital is an unavoidable challenge from the perspective of enhancing corporate value. I believe that the accumulation of these earnest and persistent efforts will, in the long run, contribute to management focused on capital cost and stock price.

### Vision 2030 formulated to survive in a world of growing uncertainty

I commend the appropriate recognition of significant losses in FY2024, rather than deferring them. I also appreciate the formulation and disclosure of "Vision 2030" as a replacement for the previous medium-term management plan amidst the challenging business environment. However, the question of how we achieve this vision is a critical mission that will determine our company's survival. The three initiatives of Vision 2030 are: (1) drastic structural reforms, (2) commitment to growth markets, and (3) sustainable value creation. I recognize all of these as essential initiatives in achieving the ambitious vision for sales of 500 billion JPY, EBITDA of 20%, and ROIC of 12% in 2030.

As an external director, I take particular note of the status of overseas subsidiaries in initiatives for achieving Vision 2030. While I have been receiving status reports via General Managers of business divisions, explanations are indirect and have often left me frustratingly unable to grasp details. General Managers of business divisions and their teams are communicating with overseas sites on a nearly daily basis, and I believe that instructions from the head office are being relayed accurately and without

delay. As an external director, however, witnessing an unexpected situation where we were forced to record extraordinary losses raises concern. It reinforces my belief that sending head office personnel to local sites is crucial, which makes recruiting and nurturing the talent necessary for such assignments an urgent task.

President Trump's re-election is said to have ignited a global trade war, making the global politics and economy entirely unpredictable. As the democratic world that post-war Japan has relied on, and the framework of free trade that underpinned Japan's economic growth, begin to falter, the governance of our overseas subsidiaries—which account for approximately 80% of our consolidated sales—will become more critical than ever. With the increasing uncertainty in global affairs, I intend to pay particularly close attention to the situation of our overseas subsidiaries.



## Management

As of May 1, 2025



### Hajime Nagasaka

President and Chief Executive Officer

Chair of the Board of Directors

Chair of the Sustainability Committee

- 1972 Joined Tokai Electrode Mfg. Co., Ltd. (currently the Company)
- 2006 Member of the Board/Executive Officer
- 2008 Member of the Board/Managing Executive Officer
- 2011 Member of the Board/Senior Managing Executive Officer  
General Manager, Carbon Black Division
- 2013 Representative Member of the Board/Senior Managing Executive  
Officer in charge of the Carbon Black Division and Graphite  
Electrodes Division
- 2014 Representative Member of the Board/Executive Vice President  
in charge of the Carbon Black Division, Graphite Electrodes  
Division, and Raw Material Procurement Department
- 2015 Representative Member of the Board/President and Chief Executive  
Officer (incumbent)



### Masafumi Tsuji

Member of the Board  
Managing Executive Officer

- 1986 Joined the Company
- 2015 Executive Officer, General Manager, Carbon Black Division
- 2016 Executive Officer, General Manager, Graphite Electrodes Division
- 2017 Member of the Board/Executive Officer, General Manager, Fine  
Carbon Division
- 2020 Member of the Board/Executive Officer with deputy responsibility  
for the Corporate Planning Department, Strategic Investment  
Department, and Sales Research & Planning Department, General  
Manager, Corporate Planning Department
- 2022 Member of the Board/Executive Officer responsible for the Corporate  
Planning Department, General Administration Department for Group  
Companies, Strategic Investment Department, Sales Research &  
Planning Department, and Business Incubation Department, General  
Manager, Corporate Planning Department
- 2023 Member of the Board/Executive Officer responsible for the Human  
Resources Department, General Affairs Department, and Legal Affairs  
Department
- 2023 Member of the Board/Managing Executive Officer responsible for  
the Human Resources Department, General Manager, Graphite  
Electrodes Division
- 2024 Member of the Board/Managing Executive Officer, General Manager,  
Graphite Electrodes Division (incumbent)



### Katsuyuki Yamaguchi

Member of the Board  
Executive Officer

- 1988 Joined the Company
- 2016 General Manager, Technology & Engineering Division
- 2018 Executive Officer, General Manager, Technology & Engineering Division
- 2019 Member of the Board/Executive Officer, General Manager,  
Technology & Engineering Division
- 2021 Member of the Board/Executive Officer  
General Manager, R&D Strategy Division, General Manager,  
Intellectual Property Department
- 2024 Member of the Board/Executive Officer  
General Manager, R&D Strategy Division (incumbent)



### Shunji Yamamoto

Member of the Board  
Executive Officer

- 1985 Joined the Company
- 2015 General Manager, Production & Technology Department,  
Carbon Black Division
- 2016 Director, Managing Director, THAI TOKAI CARBON PRODUCT  
CO., LTD.
- 2018 Executive Officer, the Company  
Director, Managing Director, THAI TOKAI CARBON PRODUCT  
CO., LTD.
- 2019 Member of the Board/Executive Officer, Director, Tokai Carbon CB  
Genpar LLC
- 2023 Member of the Board/Executive Officer, General Manager,  
Technology & Engineering Division (incumbent)



### Tatsuhiko Yamazaki

Member of the Board  
Executive Officer

- 1985 Joined the Company
- 2016 General Manager, Production & Technology Department,  
Carbon Black Division
- 2017 Business Director, General Manager, Sales Department,  
Carbon Black Division
- 2020 Business Director, the Company  
Director, Managing Director, THAI TOKAI CARBON PRODUCT  
CO., LTD.
- 2023 Member of the Board/Executive Officer, the Company  
Director, Managing Director, THAI TOKAI CARBON PRODUCT CO.,  
LTD. (incumbent)



### Takashi Masaki

Member of the Board  
Executive Officer

- 1985 Joined the Company
- 2014 Manager, Nagoya Branch
- 2016 General Manager, Raw Materials Procurement Division
- 2017 General Manager, Carbon Black Division
- 2018 Executive Officer, General Manager, Carbon Black Division
- 2020 Executive Officer with deputy responsibility for the Human Resources  
Department, General Affairs Department, and Legal Affairs  
Department, General Manager, Human Resources Department
- 2020 Executive Officer, General Manager, Smelting and Lining Division
- 2024 Member of the Board/Executive Officer  
General Manager, Smelting and Lining Division (incumbent)





## Nobumitsu Kambayashi

External Director  
(independent officer)

Chair of the Nomination Committee

Chair of the Remuneration Committee

- 1971 Joined Kawasaki Heavy Industries, Ltd.
- 2002 Director, Kawasaki Shipbuilding Corporation
- 2008 Managing Executive Officer, Kawasaki Heavy Industries, Ltd.
- 2008 Director/Senior Vice President, Kawasaki Shipbuilding Corporation
- 2010 President & Representative Director, Kawasaki Shipbuilding Corporation
- 2010 Senior Vice President (part-time), Kawasaki Heavy Industries, Ltd.
- 2010 Senior Vice President (Representative Director), Kawasaki Heavy Industries, Ltd.
- 2013 President, Ship & Offshore Structure Company
- 2013 Senior Advisor, Kawasaki Heavy Industries, Ltd.
- 2016 External Director, the Company (incumbent)
- 2017 Outside Director, Inui Global Logistics Co., Ltd. (incumbent)
- 2023 Executive Advisor, Japan Ship Technology Research Association (incumbent)



## Mayumi Asada

External Director  
(independent officer)

- 2002 Registered as an attorney at law and joined Hiranuma Takaaki Law Office
- 2014 Representative, Marunouchi Building Aoi Law Office (incumbent)
- 2014 Acquired Doctor's degree in Medicine at the Juntendo University Graduate School of Medicine
- 2020 Business Director, Incorporated Educational Institution Nikaido Gakuen (incumbent)
- 2021 External Director, the Company (incumbent)



## Yuji Serizawa

Full-Time Audit & Supervisory Board member

Chair of the Audit & Supervisory Board

- 1984 Joined the Company
- 2012 Member of the Board/Executive Officer, General Manager, Fine Carbon Division
- 2014 Executive Officer, General Manager, Graphite Electrodes Division
- 2015 Member of the Board/Executive Officer, General Manager, Graphite Electrodes Division
- 2016 Member of the Board/Executive Officer, General Manager, Corporate Strategy Division
- 2017 Member of the Board/Executive Officer responsible for the Human Resources Department, General Affairs Department, and Legal Affairs Department
- 2023 Audit & Supervisory Board member (full-time) (incumbent)



## Kanji Sugihara

Full-Time Audit & Supervisory Board member

- 1984 Joined the Company
- 2013 Executive Officer, Assistant in charge of the Fine Carbon Division, General Manager, Fine Carbon Division
- 2014 Member of the Board/Executive Officer, General Manager, Fine Carbon Division
- 2015 Member of the Board/Managing Executive Officer, General Manager, Fine Carbon Division
- 2016 Director, the Company, Director/Vice President, Tokai Konetsu Kogyo Co., Ltd.
- 2018 Director/Vice President, Tokai Konetsu Kogyo Co., Ltd.
- 2024 Audit & Supervisory Board member, the Company (full-time) (incumbent)



## Kaoru Ogashiwa

External Audit & Supervisory Board member  
(independent officer)

- 1990 Joined Research Center Management Consulting Institute, New Japan Securities Co., Ltd.
- (currently Japan Investor Relations and Investor Support, Inc.)
- 1992 Registered as a Certified Tax Accountant, Representative, Ogashiwa Kaoru Certified Tax Accountant Office (incumbent)
- 2005 Corporate Auditor, Senkon Logistics Co., Ltd.
- 2017 External Director and Audit & Supervisory Committee member, Senkon Logistics Co., Ltd. (incumbent)
- 2019 External Audit & Supervisory Board member, the Company (incumbent)



## Yoshinori Matsushima

External Audit & Supervisory Board member  
(independent officer)

- 1997 Joined Deloitte Touche Tohmatsu
- 2001 Registered as Certified Public Accountant, Representative, Matsushima Certified Public Accountant Office (incumbent)
- 2006 Registered as a Certified Tax Accountant
- 2023 External Audit & Supervisory Board member, the Company (incumbent)



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## Long-Term Earnings Summary

FY2014–FY2024 (consolidated)

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Statements of Income</b>												
Net sales	(million JPY)	114,576	104,864	88,580	106,252	231,302	262,028	201,542	258,874	340,371	363,946	<b>350,114</b>
Gross profit	(million JPY)	18,651	19,960	16,529	27,451	99,378	92,840	49,555	70,732	94,052	98,727	<b>80,635</b>
Selling, general and administrative expenses	(million JPY)	14,947	15,871	15,398	16,358	26,312	38,495	41,696	46,085	53,463	59,998	<b>61,248</b>
Operating profit	(million JPY)	3,703	4,088	1,131	11,093	73,065	54,344	7,858	24,647	40,588	38,728	<b>19,386</b>
Ordinary income	(million JPY)	4,180	4,317	1,702	12,855	72,991	52,986	6,262	24,770	42,521	41,607	<b>22,579</b>
Net income before income taxes	(million JPY)	4,345	6,726	(7,938)	15,533	95,811	51,226	6,116	23,354	42,111	41,998	<b>(47,645)</b>
Income taxes	(million JPY)	1,749	4,345	(67)	2,740	21,543	17,175	2,283	3,248	14,782	13,243	<b>5,304</b>
Net income	(million JPY)	2,562	2,484	(7,929)	12,603	74,268	34,050	3,833	20,106	27,329	28,754	<b>(52,949)</b>
EBITDA	(million JPY)	13,845	14,581	10,616	17,740	85,374	77,053	35,262	54,518	75,572	75,949	<b>61,120</b>
<b>Sales ratio</b>												
Gross profit	(%)	16.3	19.0	18.7	25.8	43.0	35.4	24.6	27.3	27.6	27.1	<b>23.0</b>
Selling, general and administrative expenses	(%)	13.0	15.1	17.4	15.4	11.4	14.7	20.7	17.8	15.7	16.5	<b>17.5</b>
Operating income (ROS)	(%)	3.2	3.9	1.3	10.4	31.6	20.7	3.9	9.5	11.9	10.6	<b>5.5</b>
Ordinary income	(%)	3.6	4.1	1.9	12.1	31.6	20.2	3.1	9.6	12.5	11.4	<b>6.4</b>
Net income before income taxes	(%)	3.8	6.4	(9.0)	14.6	41.4	19.5	3.0	9.0	12.4	11.5	<b>(13.6)</b>
Net income	(%)	2.2	2.4	(9.0)	11.6	32.1	13.0	1.9	7.8	8.0	7.9	<b>(15.1)</b>
EBITDA	(%)	12.1	13.9	12.0	16.7	36.9	29.4	17.5	21.1	22.2	20.9	<b>17.5</b>
<b>Investment-related</b>												
Capital expenditure	(million JPY)	6,830	5,301	6,013	4,282	11,794	24,341	28,873	30,347	48,150	53,316	<b>56,715</b>
Depreciation	(million JPY)	8,629	9,242	8,124	6,647	10,390	18,503	20,890	22,900	27,460	29,065	<b>33,028</b>
R&D expenses	(million JPY)	1,882	1,822	2,249	1,482	1,883	2,460	2,682	2,823	3,171	3,605	<b>4,334</b>
<b>Cash flow</b>												
Operating cash flows	(million JPY)	11,983	20,613	17,505	10,543	44,109	41,664	55,022	38,072	41,205	62,074	<b>64,471</b>
Investment cash flows	(million JPY)	(24,027)	3,189	(3,622)	(14,039)	(53,849)	(99,159)	(44,301)	(35,282)	(49,900)	(47,632)	<b>(70,777)</b>
Free cash flows	(million JPY)	(12,043)	23,802	13,883	(3,496)	(9,740)	(57,495)	10,721	2,790	(8,695)	14,442	<b>(6,306)</b>
Financing cash flows	(million JPY)	9,728	(14,926)	(7,613)	(4,534)	29,677	64,568	927	1,211	(10,629)	(14,512)	<b>9,410</b>
Increase (decrease) in cash and cash equivalents	(million JPY)	(1,307)	8,180	5,602	(6,376)	18,979	5,318	11,284	6,707	(15,057)	7,081	<b>8,676</b>
Exchange rate*	(USD/JPY)	105.85	121.05	108.85	112.19	110.43	109.05	106.82	109.80	131.43	140.56	<b>151.58</b>

\* Corporate exchange rate

\* Figures have been revised retrospectively.

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Balance Sheet</b>												
<b>Total current assets</b>	(million JPY)	94,685	87,968	77,645	85,444	164,220	196,446	177,678	215,149	246,691	262,890	<b>270,363</b>
On-hand liquidity	(million JPY)	14,862	23,045	28,528	22,152	46,797	52,695	67,174	78,858	70,909	77,465	<b>92,207</b>
Accounts receivable	(million JPY)	33,972	26,897	24,220	30,265	55,137	50,648	41,438	56,668	65,197	65,530	<b>69,175</b>
Inventory	(million JPY)	41,299	34,253	20,734	27,564	58,789	86,380	63,797	72,479	101,330	109,332	<b>100,740</b>
Other current assets	(million JPY)	4,551	3,771	4,162	5,463	3,945	6,722	5,266	7,143	9,254	10,563	<b>8,241</b>
<b>Total fixed assets</b>	(million JPY)	115,753	96,106	81,178	99,286	165,648	266,425	282,031	297,353	329,773	377,114	<b>370,390</b>
Tangible fixed assets	(million JPY)	67,581	56,629	43,122	51,405	80,312	101,343	125,007	144,165	181,948	223,804	<b>264,582</b>
Intangible fixed assets	(million JPY)	14,103	11,324	10,534	16,343	61,805	141,966	133,349	123,349	118,839	117,051	<b>66,341</b>
Investment and other assets	(million JPY)	34,069	28,153	27,521	31,537	23,529	23,115	23,674	29,838	28,986	36,258	<b>39,466</b>
<b>Total assets</b>	(million JPY)	210,439	184,074	158,824	184,730	329,868	462,872	459,709	512,503	576,465	640,005	<b>640,753</b>
<b>Total current liabilities</b>	(million JPY)	44,897	31,126	29,028	36,870	91,654	117,541	92,656	130,418	146,696	136,971	<b>147,729</b>
Short-term interest-bearing liabilities	(million JPY)	21,576	9,537	12,910	14,074	41,709	68,363	51,879	74,710	80,745	70,218	<b>73,939</b>
Accounts payable	(million JPY)	16,051	11,397	9,591	14,522	26,001	28,936	18,648	26,229	32,272	29,469	<b>26,636</b>
Other current liabilities	(million JPY)	7,269	10,191	6,525	8,274	23,944	20,241	22,129	29,478	33,676	37,280	<b>47,152</b>
<b>Total long-term liabilities</b>	(million JPY)	33,198	27,976	16,806	20,728	30,381	112,355	142,237	125,514	128,900	142,930	<b>167,865</b>
Long-term interest-bearing liabilities	(million JPY)	16,713	14,398	4,137	2,068	8,000	79,666	106,764	93,539	90,706	96,424	<b>117,301</b>
Other long-term liabilities	(million JPY)	16,484	13,577	12,669	18,660	22,381	32,689	35,473	31,974	38,190	46,504	<b>50,561</b>
<b>Total liabilities</b>	(million JPY)	78,096	59,103	45,834	57,599	122,035	229,896	234,894	255,932	275,596	279,902	<b>315,595</b>
<b>Total net assets</b>	(million JPY)	132,343	124,971	112,989	127,130	207,833	232,975	224,815	256,570	300,868	360,103	<b>325,158</b>
Shareholders' equity	(million JPY)	108,006	108,910	99,693	110,089	179,500	203,819	196,543	206,269	218,761	237,220	<b>170,469</b>
<b>Total liabilities and net assets</b>	(million JPY)	210,439	184,074	158,824	184,730	329,868	462,872	459,709	512,503	576,465	640,005	<b>640,753</b>
<b>Ratio analysis</b>												
ROA	(%)	2.1	2.2	1.0	7.5	30.0	13.4	1.4	5.1	4.7	4.5	<b>(8.3)</b>
ROE	(%)	2.0	2.0	(6.8)	10.4	46.8	16.0	0.5	7.5	9.0	8.6	<b>(18.5)</b>
Capital-to-asset ratio	(%)	61.8	66.8	69.9	68.4	56.7	45.8	43.8	44.7	46.6	50.7	<b>45.2</b>
<b>Indicator per share</b>												
EPS	(JPY)	12	12	(37)	58	344	150	4.78	75.55	105.16	119.45	<b>(265.94)</b>
BPS	(JPY)	610	577	521	593	878	994	944.16	1,075.19	1,260.95	1,521.89	<b>1,356.42</b>
Dividend	(JPY)	6	6	6	12	24	48	30	30	30	36	<b>30</b>
Dividend payout ratio	(%)	50	52	—	21	7	32	627	40	29	30	<b>—</b>



## Performance by Business Segment FY2020–FY2024 (consolidated)

		2020	2021	2022	2023	2024
<b>Carbon Black</b>						
Net sales	(million JPY)	70,754	99,491	138,484	148,423	<b>156,793</b>
Operating profit	(million JPY)	3,192	8,783	12,282	21,303	<b>21,706</b>
Operating income to sales	(%)	4.5	8.8	8.9	14.4	<b>13.8</b>
EBITDA	(million JPY)	10,171	14,868	20,491	29,270	<b>31,962</b>
EBITDA margin	(%)	14.4	14.9	14.8	19.7	<b>20.4</b>
<b>Fine Carbon</b>						
Net sales	(million JPY)	31,775	39,125	49,393	45,319	<b>53,890</b>
Operating profit	(million JPY)	6,647	9,611	14,825	10,617	<b>12,437</b>
Operating income to sales	(%)	20.9	24.6	30.0	23.4	<b>23.1</b>
EBITDA	(million JPY)	11,802	15,199	21,270	17,689	<b>20,253</b>
EBITDA margin	(%)	37.1	38.8	43.1	39.0	<b>37.6</b>
<b>Smelting and Lining</b>						
Net sales	(million JPY)	36,421	49,696	65,203	82,820	<b>64,512</b>
Operating profit	(million JPY)	1,161	1,925	1,345	2,305	<b>(13,701)</b>
Operating income to sales	(%)	3.2	3.9	2.1	2.8	<b>(21.2)</b>
EBITDA	(million JPY)	11,564	14,097	14,829	17,446	<b>2,449</b>
EBITDA margin	(%)	31.8	28.4	22.7	21.1	<b>3.8</b>

		2020	2021	2022	2023	2024
<b>Graphite Electrodes</b>						
Net sales	(million JPY)	37,879	40,619	59,630	60,235	<b>48,818</b>
Operating profit	(million JPY)	(5,766)	(400)	8,032	752	<b>(3,529)</b>
Operating income to sales	(%)	(15.2)	(1.0)	13.5	1.2	<b>(7.2)</b>
EBITDA	(million JPY)	(2,274)	4,162	13,549	6,449	<b>2,562</b>
EBITDA margin	(%)	(6.0)	10.2	22.7	10.7	<b>5.2</b>
<b>Industrial Furnaces and Related Products</b>						
Net sales	(million JPY)	13,873	18,019	16,272	15,614	<b>16,291</b>
Operating profit	(million JPY)	3,765	5,396	4,475	3,860	<b>3,304</b>
Operating income to sales	(%)	27.1	29.9	27.5	24.7	<b>20.3</b>
EBITDA	(million JPY)	3,997	5,701	4,797	4,211	<b>3,661</b>
EBITDA margin	(%)	28.8	31.6	29.5	27.0	<b>22.5</b>
<b>Others</b>						
Net sales	(million JPY)	10,837	11,922	11,387	11,532	<b>9,807</b>
Operating profit	(million JPY)	298	754	1,108	1,299	<b>403</b>
Operating income to sales	(%)	2.8	6.3	9.7	11.3	<b>4.1</b>
EBITDA	(million JPY)	832	1,313	1,589	1,783	<b>883</b>
EBITDA margin	(%)	7.7	11.0	14.0	15.5	<b>9.0</b>

## List of Sustainability Targets

Materiality		Goals	FY2024		
Themes	Elements		Specific numerical targets	Targeted sites <sup>1</sup>	
Harmony with the Global Environment	Reduction of environmental impact	Reduction of greenhouse gas emissions	Reduce total CO <sub>2</sub> emissions by 25% (vs. 2018) by 2030 and achieve carbon neutrality by 2050	Consolidated	
		Reduction of pollution	NOx emissions: 3,400 t/year or lower (base year: 2021) SOx emissions: 18,600 t/year or lower (base year: 2021) VOC (Volatile Organic Compounds): 280 t/year or lower	Consolidated <sup>2</sup>	
			Zero environmental complaints against the Company (contamination of air, water, etc.)	Consolidated	
			Change of 30% product packaging for transport to environmentally friendly packaging by the end of 2025	Tokai COBEX (TCX)	
		Reduction of water consumption	Reduction of water consumption (below 2021 level of 9 million m <sup>3</sup> /year)	Consolidated <sup>3</sup>	
	Realization of a circular economy	Recycling of waste	Recycling rate of 50% or higher (base year: 2021) <sup>5</sup>	Consolidated <sup>4</sup>	
		Use of sustainable resources	Acquisition of ISCC PLUS certification at three Carbon Black plants in Japan by 2024	Chita Plant/Ishinomaki Plant/ Wakamatsu Plant	
Contributing to Society through Business	Technological innovation	Promotion of research and development	90% or more of development expenditures allocated to reduction of environmental impact	Domestic group	
			80% or more of development expenditures allocated to reduction of environmental impact	Tokai Konetsu Kogyo Co., Ltd.	
			90% or more of patent applications in areas related to reduction of environmental impact	Domestic group	
			70% or more of patent applications in areas related to reduction of environmental impact	Tokai Konetsu Kogyo Co., Ltd.	
	Providing safe and secure products	Improvement of product quality	Zero significant quality complaints	Consolidated	
	Supply chain management	Reduction of suppliers' CSR risks	Review the survey form for CSR procurement survey, based on revisions to the Group Procurement Policy	Consolidated	
Strengthening Management Foundation	Respect for human rights	Raising employees' awareness of human rights	Implementation of human rights due diligence by overseas Group companies in accordance with their respective human rights policies	Consolidated	
	Contributing to communities	Active engagement in community contribution activities	Enhancement of disclosure of community contribution activities	Consolidated	
	Strengthening corporate governance	Internal control	Continuous improvement and enhancement of internal control	Consolidated	
			Examination of a Group-wide information sharing platform		
		Risk management	Examination raw materials procurement for stable supply of products (geopolitical risks)	Consolidated	
			Development of overseas crisis management structure (ongoing)		
	Thorough enforcement of compliance	Compliance with ethical standards, laws, and regulations	Commit no serious regulatory violations	Consolidated	
			Creation of a business base aimed at the construction of a global compliance structure		
	Development of human resources	Securing diverse talent	Increase the ratio of female employees in managerial positions from 2.8% in 2021 to 5.6% or higher by 2024	Non-consolidated	
			Percentage of new female graduates hired for career-track positions: 30% (non-consolidated)	Non-consolidated	
			Increase the number of non-Japanese employees in managerial positions by the end of 2024 (compared with 2021)	Non-consolidated	
			Increase the ratio of mid-career hires in managerial positions by the end of 2024 (compared with 2021)	Non-consolidated	
	Promoting of occupational safety and health	Implementation of effective training	Total training hours planned by head office (New-hire training / specialist training)	Domestic group	
		Reduction of occupational accidents	Reduction of frequency rate (1.20 or lower)	Consolidated	



			FY2025	
	Actual	Rating	Specific numerical targets	Target sites <sup>*1</sup>
	Total CO <sub>2</sub> emissions for the Group in 2024 (Scope1,2): 2,032 thousand tCO <sub>2</sub> e (33% reduction from 2018). This was mainly due to switching to CO <sub>2</sub> -free electrical power, fuel switching, etc.	○	Reduce total CO <sub>2</sub> emissions by 25% (vs. 2018) by 2030 and achieve carbon neutrality by 2050	Consolidated
	NOx emissions: 2,843 t, SOx emissions: 11,132 t, VOC: 167 t	○	NOx emissions: 3,330 t/year or lower (2% reduction against 2021) SOx emissions: 17,670 t/year or lower (5% reduction against 2021) VOC (Volatile Organic Compounds): 265 t/year or lower (5% reduction against 2022)	Consolidated <sup>*2</sup>
	Zero environmental complaints against the Company	○	Zero environmental complaints against the Company (contamination of air, water, etc.)	Consolidated
	We achieved our target of 38% use of eco-friendly types of packaging used for the transport of all TCX products.	○	Change 40% of product packaging for transport to environmentally friendly packaging by the end of 2025	Tokai COBEX (TCX)
	Water consumption: 8.02 million m <sup>3</sup>	○	Water consumption of 8.9 million m <sup>3</sup> /year or lower (1% reduction in consumption compared to 2021)	Consolidated <sup>*3</sup>
	Recycling rate: 58.5%	○	Recycling rate of 51% or higher (1% increase against 2021) <sup>*5</sup>	Consolidated <sup>*4</sup>
	Acquired ISCC PLUS certification at three Carbon Black plants in Japan	○	Ensure rCB <sup>*6</sup> secondary processing pilot plant is operational by the end of 2027	CB business
	93% of development expenditures allocated to reduction of environmental impact	○	90% or more of development expenditures allocated to reduction of environmental impact	Domestic group
	98% of development expenditures allocated to reduction of environmental impact	○	80% or more of development expenditures allocated to reduction of environmental impact	Tokai Konetsu Kogyo Co., Ltd.
	100% of patent applications in areas related to reduction of environmental impact	○	90% or more of patent applications in areas related to reduction of environmental impact	Domestic group
	100% of patent applications in areas related to reduction of environmental impact	○	70% or more of patent applications in areas related to reduction of environmental impact	Tokai Konetsu Kogyo Co., Ltd.
	Zero significant quality complaints	○	Zero significant quality complaints	Consolidated
	Changed the CSR procurement survey and implementation for suppliers based on revisions to the Group Procurement Policy in 2024. These changes will apply from the 2025 survey	○	Implement CSR survey of key suppliers	Consolidated
	Implemented FY2024 human rights due diligence for Tokai Carbon and at Group companies in Japan and overseas	○	Implement human rights due diligence at Tokai Carbon and at Group companies in Japan and overseas	Consolidated
	Total amount of donations and activity spending: approx. 52 million JPY (donations to shrines and festivals, donations to support regional culture, sports, and education, etc.) Community contribution activities: Cleanups, food donations, inviting students for company visits, etc.	○	Enhance disclosure of community contribution activities	Consolidated
	Conducted assessment and reporting on the status of operation of the internal control system in line with plans	○	Continuous improvement and enhancement of internal control	Consolidated
	Opened Group Portal site	○	Examination of a Group-wide information sharing platform	
	Examined substitutes for raw material procurement sources for each business, and reported to the Risk Management & Compliance Committee	○	Examination of raw materials procurement for stable supply of products (geopolitical risks)	
	Conducted desktop exercises assuming overseas contingencies, and revised the overseas risk management manual based on the results	○	Development of overseas crisis management structure (ongoing)	Consolidated
	Zero regulatory violations with serious impacts	○	Commit no serious regulatory violations	
	Discussed compliance issues that occurred with compliance supervisors at subsidiaries and worked on strengthening communications	○	Strengthen communications and cooperation with managers in charge of compliance at subsidiaries based on the actual status of compliance structure at each subsidiary in Japan and overseas	
	Percentage of female employees in managerial positions: 3.8% (as of December 31, 2024)	△	Increase the ratio of female employees in managerial positions from 3.8% in 2024 to 5.6% or higher by 2027	Non-consolidated
	Percentage of new female graduates hired (non-consolidated) who entered the company in April 2025: 25%	△	Percentage of new female graduates hired for career-track positions: 30% (non-consolidated)	Non-consolidated
	The number of non-Japanese employees in managerial positions decreased compared with 2021	×	Establish a supportive working environment for employees raising children or providing nursing care for family members	Non-consolidated
	Ratio of mid-career hires in managerial positions as of December 31, 2024: 33% (2021: 8%)	○	Enhancement of engagement score (compared to the previous score)	Non-consolidated
	Specialist training: 1,942 hours; New-hire training: 5,162 hours	○	Total training hours planned by head office (New-hire training / specialist training)	Domestic group
	Frequency rate: 1.11	○	Reduction of frequency rate (1.10 or lower)	Consolidated

\*1 Domestic group: Tokai Carbon Co., Ltd. + major domestic subsidiaries (Tokai Konetsu Kogyo Co., Ltd., Tokai Fine Carbon Co., Ltd., Tokai Material Co., Ltd.) but excluding Tokai Konetsu Kogyo for No. 8 and 10.

\*2 NOx: Tokai Carbon Co., Ltd. + 7 overseas companies (TOKAI ERFT CARBON GmbH, TOKAI CARBON GE LLC, Tokai Carbon CB Ltd., Cancarb Limited, THAI TOKAI CARBON PRODUCT CO., LTD., Tokai COBEX Polska sp. z o.o., Tokai COBEX Savoie SAS);

SOx: Tokai Carbon Co., Ltd. + 6 overseas companies (TOKAI ERFT CARBON GmbH, TOKAI CARBON GE LLC, Tokai Carbon CB Ltd., THAI TOKAI CARBON PRODUCT CO., LTD., Tokai COBEX Polska sp. z o.o., Tokai COBEX Savoie SAS);

VOC: Tokai Carbon Co., Ltd. + 4 overseas companies (TOKAI CARBON GE LLC, Tokai Carbon CB Ltd., Tokai COBEX Polska sp. z o.o., Tokai COBEX Savoie SAS)

\*3 Tokai Carbon Co., Ltd. + 9 domestic and overseas companies (TOKAI ERFT CARBON GmbH, TOKAI CARBON GE LLC, Tokai Carbon CB Ltd., Cancarb Limited, THAI TOKAI CARBON PRODUCT CO., LTD., Tokai Fine Carbon Co., Ltd., TOKAI CARBON KOREA CO., LTD., Tokai COBEX Polska sp. z o.o., Tokai COBEX Savoie SAS)

\*4 Tokai Carbon Co., Ltd. + 11 domestic and overseas companies (Tokai Konetsu Kogyo Co., Ltd., Tokai Fine Carbon Co., Ltd., Tokai Material Co., Ltd., TOKAI ERFT CARBON GmbH, TOKAI CARBON GE LLC, Tokai Carbon CB Ltd., Cancarb Limited, THAI TOKAI CARBON PRODUCT CO., LTD., TOKAI CARBON KOREA CO., LTD., Tokai COBEX Polska sp. z o.o., Tokai COBEX Savoie SAS)

\*5 Recycling rate (%) = recycling weight (weight of recycled waste) ÷ weight of generated waste x 100

\*6 rCB (recovered Carbon Black): Recovered carbon black extracted from polymer products such as end-of-life tires containing rubber.

## Non-financial Indicators (Social)

	Boundary	Unit	2020	2021	2022	2023	2024
Number of employees	Consolidated	persons	4,178	4,289	4,378	4,427	<b>4,625</b>
Number of employees	Non-consolidated	persons	778	760	763	779	<b>782</b>
Ratio of overseas employees	Consolidated	%	68.9	70.4	70.7	70.2	<b>71.3</b>
Ratio of female employees	Non-consolidated	%	8.5	8.3	9.6	9.5	<b>9.5</b>
Ratio of new female graduates hired for career-track positions	Non-consolidated	%	20.8	33.3	66.6	40.0	<b>33.3</b>
Ratio of women in managerial positions	Non-consolidated	%	-	2.8	3.0	4.0	<b>3.8</b>
Ratio of women in managerial positions	Overseas subsidiaries <sup>*1</sup>	%	-	-	-	-	<b>22.0</b>
Ratio of non-Japanese employees in managerial positions	Non-consolidated	%	-	-	1.5	1.0	<b>0.0</b>
Ratio of mid-career hires in managerial positions	Non-consolidated	%	-	-	10.0	11.8	<b>34.6</b>
Ratio of employment of individuals with disabilities	Non-consolidated	%	2.53	2.55	2.36	1.94	<b>2.14</b>
Number of new hires	Non-consolidated	persons	-	-	-	54	<b>46</b>
Number of employees resigning (mandatory retirees)	Non-consolidated	persons	17	31	37	36(15)	<b>44(13)</b>
Rate of employee turnover	Non-consolidated	%	2.19	4.08	4.85	4.62	<b>5.63</b>
Number of employees resigning for personal reasons	Non-consolidated	persons	12	20	25	21	<b>30</b>
Rate of employees resigning for personal reasons	Non-consolidated	%	1.15	2.63	3.28	2.7	<b>3.84</b>
Percentage of employees returning from childcare leave	Non-consolidated	%	100	100	100	100	<b>100</b>
Usage rate of childcare leave by male workers	Non-consolidated	%	-	-	-	90.4	<b>103.5</b>
Average acquisition rate for annual paid holidays	Non-consolidated	%	62.9	69.3	77.7	76.6	<b>*2</b>
Employees' monthly average overtime work hours	Non-consolidated	h	7.93	11.17	10.55	10.45	<b>*2</b>
Occupational accident frequency rate	Consolidated	-	1.22	1.30	1.20	0.80	<b>1.11</b>

\*1 Applies to overseas subsidiaries with 250 or more employees

\*2 Performance data for 2024 is scheduled to be updated on our website around July 2025



## Non-financial Indicators (Environmental)

★ Data assured by a third party

		Unit	2018	2019	2020	2021	2022	2023	2024
<b>GHG emissions*1</b>									
CO <sub>2</sub> emissions (Scope 1+2)	Consolidated	thousand tCO <sub>2</sub> e	3,056	2,687	2,232	2,409	2,408	2,219	<b>2,032 ★</b>
Scope 1	Consolidated	thousand tCO <sub>2</sub> e	2,430	2,164	1,825	2,070	2,018	1,900	<b>1,745 ★</b>
Scope 2	Consolidated	thousand tCO <sub>2</sub> e	626	523	406	339	391	318	<b>287 ★</b>
Scope 3	Consolidated	thousand tCO <sub>2</sub> e	-	N/A	N/A	N/A	1,805	1,596*6	<b>*4</b>
Category 1	Consolidated	thousand tCO <sub>2</sub> e	-	N/A	N/A	N/A	1,343	1,125*6	<b>967 ★</b>
Category 2	Consolidated	thousand tCO <sub>2</sub> e	-	N/A	N/A	N/A	51	99	<b>145 ★</b>
Category 3	Consolidated	thousand tCO <sub>2</sub> e	-	N/A	N/A	N/A	82	74	<b>66 ★</b>
Category 4	Non-consolidated	thousand tCO <sub>2</sub> e	6	5	5	6	6	7	
Category 5	Non-consolidated	thousand tCO <sub>2</sub> e	0.7	0.5	0.4	0.7	0.5	0.6	<b>*4</b>
Category 6	Non-consolidated	thousand tCO <sub>2</sub> e	-	N/A	N/A	N/A	0.4	0.5	<b>*4</b>
Category 7	Non-consolidated	thousand tCO <sub>2</sub> e	-	0.4	0.4	0.4	0.4	0.4	<b>*4</b>
Category 8		thousand tCO <sub>2</sub> e	-	N/A	N/A	N/A	N/A	N/A	<b>N/A</b>
Category 9		thousand tCO <sub>2</sub> e	-	N/A	N/A	N/A	N/A	0.7	<b>*4</b>
Category 10		thousand tCO <sub>2</sub> e	-	N/A	N/A	N/A	N/A	0.9	<b>*4</b>
Category 11	Consolidated	thousand tCO <sub>2</sub> e	-	2,827	1,402	1,228	321	288	<b>256 ★</b>
Category 12	Consolidated	thousand tCO <sub>2</sub> e	-	-	-	-	-	-	<b>-</b>
Category 13		thousand tCO <sub>2</sub> e	-	N/A	N/A	N/A	N/A	N/A	<b>N/A</b>
Category 14		thousand tCO <sub>2</sub> e	-	N/A	N/A	N/A	N/A	N/A	<b>N/A</b>
Category 15		thousand tCO <sub>2</sub> e	-	N/A	N/A	N/A	N/A	N/A	<b>N/A</b>
<b>Energy consumption*1</b>									
Total energy consumption	Consolidated	GWh	2,097	2,002	1,983	2,047	2,383	2,391	<b>2,039 ★</b>
Non-renewable energy consumption	Consolidated	GWh	2,097	2,002	1,983	1,867	2,178	2,173*6	<b>1,847 ★</b>
Renewable energy consumption	Consolidated	GWh	0	0	0	180	204	218*6	<b>192 ★</b>
<b>Water</b>									
Amount of water intake	Consolidated*2	thousand m <sup>3</sup>		8,937	7,836	9,006	8,726	8,452	<b>8,019</b>
Water intake per unit of sales	Consolidated			34.1	38.9	34.8	25.6	23.1	<b>22.9</b>
Effluent	Consolidated	thousand m <sup>3</sup>	-	2,742	2,609	2,717	2,548	2,637	<b>2,633</b>
<b>Industrial waste</b>									
Amount generated (hazardous)	Consolidated*3	t	-	-	3,332	2,216	2,569	2,805	<b>1,480</b>
Amount generated (non-hazardous)	Consolidated	t	-	-	34,774	36,669	43,348	43,472	<b>36,282</b>
Recycled amount	Consolidated	t	-	-	21,608	19,406	20,516	24,886	<b>22,080</b>
Recycling rate	Consolidated	%	-	-	56.7	49.9	44.7	53.8	<b>58.5</b>
Final disposal amount (landfill amount)	Consolidated	t	-	-	12,939	15,160	16,337	14,859	<b>7,703</b>
Final disposal rate (landfill rate)	Consolidated	%	-	-	34.0	39.0	35.6	32.1	<b>20.4</b>

\*1 The calculation methods for GHG emissions and energy consumption are outlined on the next page (P. 65)

\*2 Tokai Carbon Co., Ltd. + 9 major subsidiaries (Tokai Fine Carbon Co., Ltd., TOKAI ERFT CARBON GmbH, TOKAI CARBON GE LLC, Tokai Carbon CB Ltd., Cancarb Limited, THAI TOKAI CARBON PRODUCT CO., LTD., TOKAI CARBON KOREA CO., LTD., Tokai COBEX Polska sp. z o.o., Tokai COBEX Savoie SAS)

\*3 Tokai Carbon Co., Ltd. + 11 major subsidiaries (Tokai Konetsu Kogyo Co., Ltd., Tokai Material Co., Ltd., TOKAI ERFT CARBON GmbH, TOKAI CARBON GE LLC, Tokai Carbon CB Ltd., Cancarb Limited, THAI TOKAI CARBON PRODUCT CO., LTD., TOKAI CARBON KOREA CO., LTD., Tokai COBEX Polska sp. z o.o., Tokai COBEX Savoie SAS)

\*4 Performance data for 2024 is scheduled to be updated around July

\*5 Amended an error in 2023 values

\*6 Amended a classification error in the amount of renewable energy used in 2023

## GHG emissions (Scope 1, Scope 2, Scope 3) and energy consumption calculation method

### Scope 1, Scope 2, energy consumption calculation method

#### Boundary

CO <sub>2</sub> , Energy consumption	All consolidated production sites, head offices, branches, and laboratories (Tokai Carbon (Dalian) Co., Ltd., Tokai Carbon (Suzhou) Co., Ltd., Shanghai Tokai Konetsu Co., Ltd., Tokai Konetsu (Suzhou) Co., Ltd., and TOKAI CARBON EUROPE Ltd. Italia Branch were added to the boundary in 2022. KBR, Inc. and MWI, Inc. that were consolidated in December 2024 are not included in the boundary of 2024.)
CH <sub>4</sub> , N <sub>2</sub> O	Starting in 2022, major production sites that account for approximately 98% of consolidated CO <sub>2</sub> emissions have been added to the scope of calculation

#### Period of tabulation

		Japan	Overseas
Energy consumption	—	April–March of the following year through 2020 (January–December for Tokai Konetsu Kogyo Co., Ltd.) 2021 and after: January - December	January - December
CO <sub>2</sub>	Energy sources	2021 and after: January - December	January - December
	Non-energy sources	January - December	January - December
CH <sub>4</sub> , N <sub>2</sub> O	—	January - December *(Calculated from 2022)	

#### Calculation method

- GHG emissions (Scope 1, 2) are calculated as the CO<sub>2</sub> equivalent emissions using the global warming potentials for CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O gases. HFCs, PFCs, and SF<sub>6</sub> are excluded from calculations as only small amounts of these chemicals are emitted.
- GHG emissions quantification is subject to uncertainty when measuring activity data, determining emission factors, and considering scientific uncertainty inherent in the Global Warming Potentials.

#### Scope 1:

Direct GHG emissions from corporate activities, including energy-derived GHG emissions and non-energy-derived GHG emissions (emissions from industrial processes) are tabulated. In principle, GHG emissions from non-energy sources are calculated from the amount of raw and auxiliary materials used and the balance of products and waste.

#### Scope 2:

- Indirect CO<sub>2</sub> emissions associated with the use of energy in corporate activities.
- The market-based method in the GHG Protocol is used. For emissions in Japan, emission coefficients by electricity utility based on the Act on Promotion of Global Warming Countermeasures are used. For overseas emissions, emission coefficients published by electricity utilities are used, although the latest emission coefficients published by IEA or national and regional authorities are used for emissions from some plants.

#### Energy consumption:

- Fuel, electricity (including solar power generation) and steam used at each site are tabulated. However, by-product gases generated during the production processes are not included.
- In principle, the unit calorific value of fuel is calculated using the higher heating value of the Energy Conservation Act.

### Scope 3 calculation method

#### Boundary

- The reporting boundary from 2019 to 2021 is Tokai Carbon Co., Ltd.. That for Categories 1, 2, 3, 11 and 12 from 2022 is Tokai Carbon Co., Ltd. and its consolidated subsidiaries.
- However, Categories 11 and 12 cover only some businesses and products.

#### Period of tabulation

Category 1–3, 5–15: January–December  
Category 4: April–March of the following year

#### Calculation method

- References used in calculation of Scope 3 include “Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain Ver 2.7” and “The Emissions Unit Database for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.5)” from the Ministry of the Environment and the Ministry of Economy, Trade and Industry; emission coefficients by electrical utility published by the Ministry of the Environment; and emissions factor specified in LCI Database AIST-IDEA Ver.3.4.1.
- Category 1: Through 2021, calculated as total value of procurement of major raw materials multiplied by emission factor. From 2022, it is calculated for the top 80% or more of the value of purchased raw materials and auxiliary materials by multiplying the annual purchase for each target item by the emission factor.
- Category 2: Calculated by multiplying the purchase value of capital goods by emission factor.
- Category 3: Calculated by multiplying the amount of energy totaled in Scope 1 and 2 by emission factor.
- Category 4: Calculated by multiplying the fuel consumption and transport ton-kilometers by emission factor.
- Category 5: Calculated by multiplying type-specific amount of waste disposal and recycling by emission factor.
- Category 6: Calculated by means-of-transportation-specific value of transportation expenses by emission factor, and adding the number of accommodation stays multiplied by the emission factor of the accommodation facilities.
- Category 7: Calculated by multiplying the number of employees by number of business days and by emission factor.
- Category 9: The reporting boundary is the Fine Carbon Division. Calculated by multiplying the transport ton-kilometers by emission factor for the logistics of products sold by the Fine Carbon business through to the final consumers.
- Category 10: The reporting boundary is the Fine Carbon Division. Calculated by multiplying the sales volume of intermediate products in the Fine Carbon business by the emissions factor per processing volume.
- Category 11: The reporting boundary through 2021 is the Graphite Electrodes Division. Calculated by multiplying products' energy consumption and sales volume by emission factor, and adding the CO<sub>2</sub> generated from the products themselves during use. The reporting boundary from 2022 is the Graphite Electrodes Division and the Smelting and Lining Division. CO<sub>2</sub> generated from the products themselves during use is calculated.
- Category 12: The reporting boundary is the Graphite Electrodes Division.
- GHG emissions quantification is subject to uncertainty when measuring activity data, determining emission factors, and considering scientific uncertainty inherent in the Global Warming Potentials.



## Company Overview

As of May 1, 2025

### Company Overview

Trade Name	TOKAI CARBON CO., LTD.
Head Office	Aoyama Building, 1-2-3 Kita-Aoyama, Minato-ku, Tokyo 107-8636 Japan Tel: +81-3-3746-5100 (switchboard)
Established	1918
Representative	Hajime Nagasaka, President and CEO
Accounting period	January 1 to December 31
Fiscal year end	December
Share capital	20,436 million JPY
Number of employees	782 (4,625 including group companies) (as of December 2024)
Operations	Manufacture and sales in the following business segments: Carbon Black, Fine Carbon, Smelting and Lining, Graphite Electrodes, Industrial Furnaces and Related Products, Friction Materials, Anode Materials

TOKAI CARBON Head Office

Fuji Research Laboratory

Shonan Plant

Chigasaki Laboratory

Ishinomaki Plant

Chita Plant

Chita Laboratory

Nagoya Branch

Shiga Plant

Osaka Branch

Hofu Plant

Anode Material Production and Technology Center

Kyushu-Wakamatsu Plant

Tanoura Plant

Tanoura Laboratory

Oriental Sangyo Co., Ltd.

Mitomo Brake Co., Ltd.

Tokai Fine Carbon Co., Ltd.

Tokai Konetsu Kogyo Co., Ltd.

Tokai Material Co., Ltd.

Tokai Noshiro Seiko Co., Ltd.

Tokai Unyu Co., Ltd.

### Group Companies

Tokai Carbon Deutschland GmbH

TOKAI ERFTCARBON GmbH\*

TOKAI CARBON EUROPE Ltd.

Tokai COBEX GmbH

Tokai COBEX Savoie SAS

Tokai COBEX Polska sp. z o.o.

Tokai Carbon U.S.A., Inc.

Cancarb Limited

TOKAI CARBON GE LLC

Tokai Carbon CB Ltd.

MWI, Inc.

Tokai Carbon US Holdings Inc.

KBR, Inc.

\* Transfers already announced in May 2025.

Tokai Konetsu (Suzhou) Co., Ltd.

Tokai Carbon (Suzhou) Co., Ltd.

Shanghai Tokai Konetsu Co., Ltd.

Tokai Carbon (Dalian) Co., Ltd.

Tokai COBEX (Beijing) Ltd.

THAI TOKAI CARBON PRODUCT CO., LTD.

TOKAI CARBON KOREA CO., LTD.

Stock Information (as of December 2024)

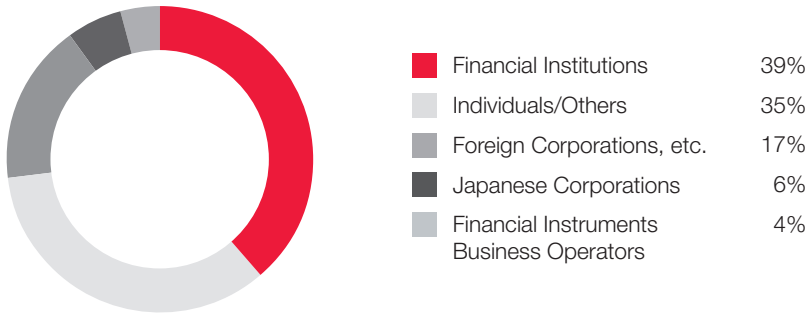
Stock Summary

Stock exchange listing	Prime Market of Tokyo Stock Exchange, Inc.
Securities code	5301
General Meeting of Shareholders	March
Shareholder record date	General Meeting of Shareholders: December 31 Year-end dividend of surplus: December 31 Interim dividend: June 30 (when applicable)
Share unit	100 shares
Shareholder registry administrator	Mitsubishi UFJ Trust and Banking Corporation
Method of public notice	Electronic notice (When unavoidable circumstances prevent notice from being given electronically, notice is posted in The Nikkei.)

Stock Figures

Total number of shares issued by the Company	598,764,000 shares
Total number of outstanding shares (including treasury stock)	224,943,104 shares
Total number of shareholders	130,148

Shareholding ratio\*



Note: Shareholding ratios are calculated with treasury stock excluded.  
\* Ratio of the number of shares owned to the total number of issued shares (excluding treasury stock)

Major shareholders

Name	Number of shares held (thousand shares)	Shareholding ratio (%)*
The Master Trust Bank of Japan, Ltd. (Trust Account)	42,300	19.82
Custody Bank of Japan, Ltd. (Trust Account)	16,115	7.55
MUFG Bank, Ltd.	5,827	2.73
STATE STREET BANK AND TRUST COMPANY 505001	5,033	2.36
NORTHERN TRUST GLOBAL SERVICES SE,LUXEMBOURG RE LUDU RE:UCITS CLIENTS 15.315 PCT NON TREATY ACCOUNT	4,732	2.22
Mitsubishi UFJ Trust and Banking Corporation	4,609	2.16
Mitsubishi UFJ Morgan Stanley Securities	2,790	1.31
STATE STREET BANK AND TRUST COMPANY 505223	2,537	1.19
STATE STREET BANK WEST CLIENT - TREATY 505234	2,502	1.17
Tokio Marine & Nichido Fire Insurance Co., Ltd.	2,426	1.14

Note 1: Tokai Carbon holds 11,470,000 shares of treasury stock but is not listed among the major shareholders above.  
Note 2: The shareholding ratio was calculated with treasury stock excluded.

Share Owner Information

Shareholder	Number of shares held (thousand shares)
Financial Institutions	83,567 (39%)
Individuals/Others	73,767 (35%)
Foreign Corporations, etc.	36,418 (17%)
Japanese Corporations	12,012 (6%)
Financial Instruments Business Operators	7,707 (4%)
Total	213,472 (100%)

Note: The shareholding ratio was calculated with treasury stock excluded.



## Investor Relations (IR) Activities

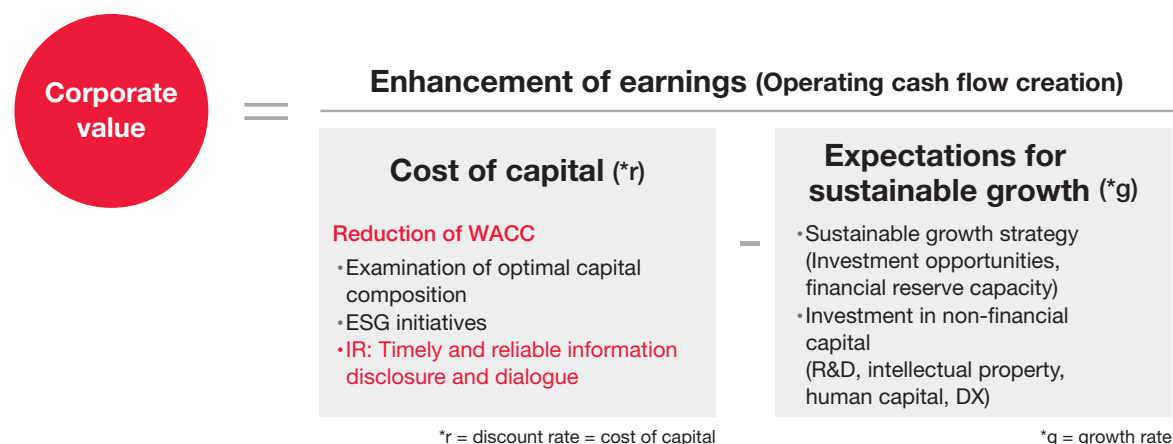
An increasingly important part of companies' public relations activities is disclosure that goes beyond a perfunctory disclosure of performance to transparently reveal management strategy that integrates the concepts of sustainability and ESG and to actively communicate with the market. We aim to broaden this communication to a wide range of stakeholders, including not only investors, but also customers, business partners, employees, and society at large. To this end, we are committed to enriching company information dissemination and dialogue across various media.

We hope to clearly communicate our goals, business environment, competitive landscape, and individual businesses' strategies from a medium- to long-term perspective, thereby helping to gain understanding of the potential inherent in materials that typically go unseen by most people.

IR functions currently fall under the Corporate Planning Department. However, through precise communication with the General Affairs Department in charge of sustainability as well as our management, finance, accounting, and business organizations, we promote (1) timely and appropriate information disclosure and (2) dialogue with shareholders and investors. We undertake IR activities day by day with the aim of minimizing information asymmetry and thereby reducing costs of capital.

### IR activities focused on costs of capital

Each year, we provide a comprehensive disclosure of our efforts for enhancing our corporate value by adopting management practices that are mindful of capital costs and share prices.



### FY2024 results

Event	Actual	Japan
<b>Financial results briefing for institutional investors and securities analysts</b>	4 times	Held briefings led by the President & CEO and the officer responsible for the accounting & finance department to explain financial results and future outlooks. These briefings followed by a Q&A session, were streamed live and recording posted (quarterly).
<b>Small-group meetings hosted by securities analysts</b>	3 times	Attended by the President & CEO. Dialogues with institutional investors on management policy, business strategy, the business environment, etc.
<b>Individual dialogue with domestic and foreign institutional investors and securities analysts</b>	204 dialogues	President & CEO: 14 dialogues (including attendance at conferences) Manager in charge of IR: 190 dialogues (All interview records are shared with all members of management in a timely manner.)
<b>Briefing for securities analysts hosted by the Company</b>	1 time	The President & CEO, officers responsible for finance and accounting, and the heads of six business divisions interacted with multiple securities analysts and press reporters. In fiscal year 2024, the Smelting and Lining business and Fine Carbon business were selected as the theme.
<b>Participation in fairs for retails investors</b>	1 time	Hosted a booth at the Nikkei IR Retail Investor Fair. Arranged mainly by the General Affairs (IR/ESG) department.

## Independent Third-Party Assurance Report

### Independent Practitioner's Limited Assurance Report

To the President and CEO of Tokai Carbon Co., Ltd.

#### Conclusion

We have performed a limited assurance engagement on whether selected environmental performance indicators (the "subject matter information" or the "SMI") presented in Tokai Carbon Co., Ltd.'s (the "Company") Integrated Report 2025 (the "Report") for the year ended December 31, 2024 have been prepared in accordance with the criteria (the "Criteria"), which are established by the Company and are explained in the Data section of the Report. The SMI subject to the assurance engagement is indicated in the Report with the symbol "★".

Based on the procedures performed and evidence obtained, nothing has come to our attention to cause us to believe that the Company's SMI for the year ended December 31, 2024 is not prepared, in all material respects, in accordance with the Criteria.

#### Basis for Conclusion

We conducted our engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised), *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information*, and International Standard on Assurance Engagements (ISAE) 3410, *Assurance Engagements on Greenhouse Gas Statements*, issued by the International Auditing and Assurance Standards Board (IAASB). Our responsibilities under those standards are further described in the "Our responsibilities" section of our report.

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA).

Our firm applies International Standard on Quality Management (ISQM) 1, *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements*, issued by the IAASB. This standard requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

#### Other information

Our conclusion on the SMI does not extend to any other information that accompanies or contains the SMI (hereafter referred to as "other information"). We have read the other information but have not performed any procedures with respect to the other information.

#### Responsibilities for the SMI

Management of the Company are responsible for:

- designing, implementing and maintaining internal controls relevant to the preparation of the SMI that is free from material misstatement, whether due to fraud or error;
- selecting or developing suitable criteria for preparing the SMI and appropriately referring to or describing the criteria used; and
- preparing the SMI in accordance with the Criteria.

#### Inherent limitations in preparing the SMI

As described in the Data section of the Report, GHG emissions quantification is subject to uncertainty when

measuring activity data, determining emission factors, and considering scientific uncertainty inherent in the Global Warming Potentials. Hence, the selection by management of a different but acceptable measurement method, activity data, emission factors, and relevant assumptions or parameters could have resulted in materially different amounts being reported.

#### Our responsibilities

We are responsible for:

- planning and performing the engagement to obtain limited assurance about whether the SMI is free from material misstatement, whether due to fraud or error;
- forming an independent conclusion, based on the procedures we have performed and the evidence we have obtained; and
- reporting our conclusion to the Company's management.

#### Summary of the work we performed as the basis for our conclusion

We exercised professional judgment and maintained professional skepticism throughout the engagement. We designed and performed our procedures to obtain evidence about the SMI that is sufficient and appropriate to provide a basis for our conclusion. Our procedures selected depended on our understanding of the SMI and other engagement circumstances, and our consideration of areas where material misstatements are likely to arise. In carrying out our engagement, the procedures we performed primarily consisted of:

- assessing the suitability of the criteria applied to prepare the SMI;
- conducting interviews with the relevant personnel of the Company to obtain an understanding of the key processes, relevant systems and controls in place over the preparation of the SMI;
- performing analytical procedures including trend analysis;
- identifying and assessing the risks of material misstatements;
- performing a site visit at one of the Company's sites in Japan which was determined through our risk assessment procedures;
- performing, on a sample basis, recalculation of amounts presented as part of the SMI;
- performing other evidence gathering procedures for selected samples; and
- evaluating whether the SMI was presented in accordance with the Criteria.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

/s/ Kazuhiko Saito

**Kazuhiko Saito, Engagement Partner**  
**KPMG AZSA Sustainability Co., Ltd.**  
**Tokyo Office, Japan**  
**July 18, 2025**

Notes to the Reader of Assurance Report:

This is a copy of the Assurance Report and the original copies are kept separately by the Company and KPMG AZSA Sustainability Co., Ltd.



## Status of Inclusion in ESG Indexes



**FTSE4Good**



**FTSE Blossom  
Japan**



**FTSE Blossom  
Japan Sector  
Relative Index**

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.

### 2024 CONSTITUENT MSCI JAPAN ESG SELECT LEADERS INDEX

### 2024 CONSTITUENT MSCI NIHONKABU ESG SELECT LEADERS INDEX

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Date of issue August 2025

Reporting boundary Tokai Carbon Co., Ltd. and its affiliated companies. Where the reporting boundary is limited is indicated separately.

Reporting period Excluding content with specific dates, this report reflects activities between January 1, 2024 and December 31, 2024.



Our website presents up-to-date information and details on our businesses and on environmental and social matters. We invite you to visit the website to learn more about Tokai Carbon.

<https://www.tokaicarbon.co.jp/en/>



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