Challenge 2027: Stage 2

Mid-Term Management Plan 2025-2027



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 Optimization of business portfolio and increased corporate value based on the five strategies of the previous Mid-Term Management Plan

< Five Strategies >

- 1. Accelerate growth businesses
- 2. Expand R&D
- 3. Improve profitability of existing businesses
- 4. Advance ESG management
- 5. Restructuring of business infrastructure

< Management Policy >

Aiming to increase corporate value by optimizing business portfolio

< Review >

- : Market environment slowed down for electronic materials and silicon wafers
- O : Narrowed down development fields (to about half). Three research laboratories system
- ∴ Although operating profit of 3.0 billion yen was achieved, profit margin improvement was insufficient
- : Promoted initiatives such as climate change and human capital investment
- O : Implemented a review of shifting to an operating holding company structure. Expansion of IT environment, etc.
- Carried out management in line with our business portfolio
 - ► Integration of businesses in the Focus and Development Areas into one company
 - Aggressive investment in the Focus and Development Area businesses
 - Withdrawal from some unprofitable businesses and products
 - Profitability improvement in the Base Area businesses (increase in operating profit)



 Profitability improved thanks to the fruition of various planned initiatives and changes in the external environment

ı	FY2021 (Start of the previous Mid-Term Management Plan)	FY2024 Initial Plan (Final year of the previous Mid-Term Management Plan	FY2022	FY2023	FY2024
Net sales	33.8 billion yen	37.0 billion yen	36.0 billion yen	36.5 billion yen	38.0 billion yen
Operating profit	2.50 billion yen	3.0 billion yen	2.64 billion yen	3.35 billion yen	2.9 billion yen
Profit	2.33 billion yen	2.2 billion yen	2.24 billion yen	2.59 billion yen	2.8 billion yen

- ✓ Operating profit achieved the initial plan by +350 million yen in FY2023. Profit-focused initiatives such as fair price negotiations and manufacturing cost reductions yielded results. Contributions from new businesses and new products were still small.
- The markets for electronic materials and silicon wafers were sluggish due to the effects of domestic and international inventory adjustments.
 In particular, profits in the silicon wafer sector have significantly declined even in the final year.
 - Reviewing of profit structure as the "Foundation Enhancement" stage. Respond flexibly to changes in the external environment

While optimizing the business portfolio, aim to further strengthen profitability by establishing new businesses



◆ Decided on capital investment of approximately 9.0 billion yen in total

Capital investment plan at formulation of Mid-Term Management Plan

Focus Area 1.0 billion yen Development Area 1.0 billion yen

Base Area 5.5 billion yen

DX Promotion 1.5 billion yen

Review of capital investment plan

Focus and Development Areas
6.0 billion yen, of which 2.5 billion yen completed,
3.5 billion yen in progress

Base Area
2.5 billion yen, of which
1.5 billion yen completed,
1.0 billion yen in progress

DX 500 million yen

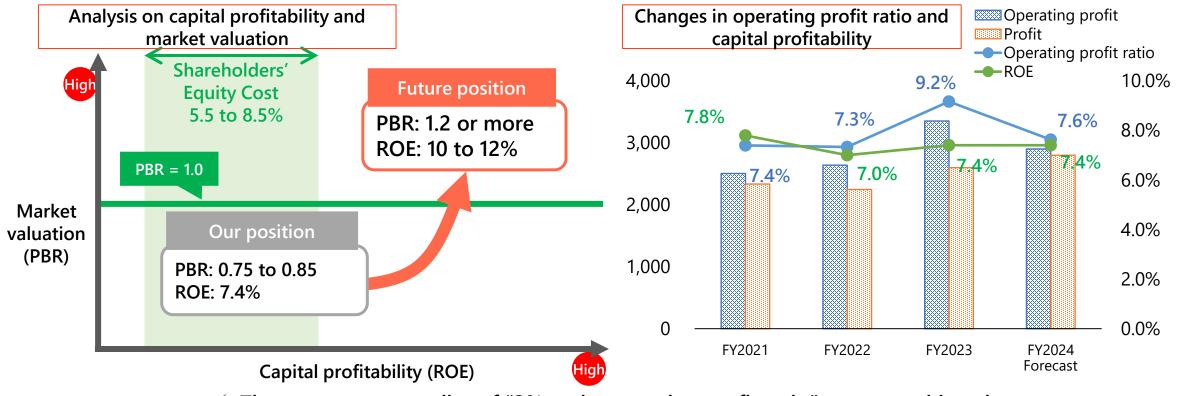
- Decided to increase investment in the ammonium perchlorate business and material assessment service (contract testing business), where future demand is expected.
 - The investment in construction to increase production capacity for ammonium perchlorate <u>completed up to the first stage</u>. Contracted battery testing laboratory is <u>scheduled to start operation in 2025</u>.
- ✓ In addition to above investment, decided to implement the investment in aging facilities in each business area, including the Base Area. Regarding some energy-saving investments, the investment content verification took longer than expected, so it was postponed to the Challenge 2027 period.
- ✓ In DX promotion, implemented <u>replacement of the core systems and enhancement of the IT department.</u> Scheduled to start operation in 2025.

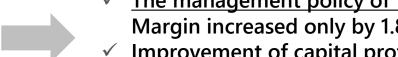


Plans to increase production capacity and upgrade aging facilities are in the start to the execution stage Further expansion of new businesses and Focus and Development Area businesses is a future management issue



- Formulated "Rolling Plan 2023" and "Grow Up Plan 2024" with the Mid-Term Management Plan "Challenge 2024" as the core
- Considered initiatives while analyzing capital profitability and market valuation





- The management policy of "3% up in operating profit ratio" was not achieved. Margin increased only by 1.8% in FY2023 (compared to FY2021).
- Improvement of capital profitability and market valuation remained incomplete. Continue to work on it as a medium- to long-term management issue.



Long-Term Vision

What is Carlit Co., Ltd.?





Carlit explosives | are our founding business and the origin of the Company name

The raw material is ammonium perchlorate.

Currently used as a raw material for solid propellants for space development rockets

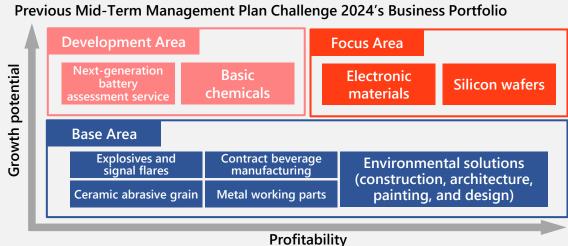
Electrolysis technology for production

Handling technology for explosives and hazardous materials



- Derive core technologies into various products and services to provide value to society and life
- Organized business groups and introduced business portfolio management in the Mid-Term Management Plan Challenge 2024





Management Philosophy Framework







(calligraphy by founder Soichiro Asano)

The founder's philosophy of "Strenuous Efforts," which means rising to the occasion in the face of adversity, to never giving up, and creating businesses needed by society with an indomitable fighting spirit, is the foundation of our management philosophy framework.

Management **Philosophy**

For Confidence and Infinite Challenges

Providing "Relief" and "Prosperous" through reliable manufacturing and services

To contribute to a sustainable society by combining the power of "chemistry" and "technology" to support people's happy lives.

Looking back on our business, which has been around for over 100 years, we recognized it as our "Raison d'etre (Purpose)."

At the same time, we have defined the value that we provide to society and people for the next 100 years as "Our Vision."

Raison d'etre (Purpose)

Our Vision (Ideal Carlit Group in 2030 to 2035)

> **Our Value** (Code of Conduct)

Corporate Slogan Giving Shape to Infinite Possibilities

Our management philosophy is to continue new challenges, with the "trust" that we have built since our founding, handling hazardous materials and explosives, as our banner.

In the Mid-Term Management Plans, we use the "Infinite Challenges" of our management philosophy as a keyword, and named the previous term "Challenge 2024" and this term "Challenge 2027."

- 1. Customer First Policy
- 2. Safety First
- 3. Social Contribution

In addition to our three Values (Code of Conduct), the Basic Policy for Sustainability is positioned as a common concept in all philosophy frameworks.

[Basic Policy for Sustainability] Through manufacturing and the provision of services under our management philosophy, the Carlit Group intends to contribute to the resolution of social issues to help build a sustainable society.

Social Issue and Value Creation Process



Social Issues

Development of an ultra-smart society

(Advanced electronics sector)

Convenient and secure

mobility and infrastructure

(Mobility sector)

(Next-generation infrastructure sector)

A richer, greener lifestyle

Business Activities Management Capital

Value Generated and Future

Electronic materials

Assessment service

Silicon wafers

Ceramic abrasive grain

Solid propellants

Explosives and signal flares

Metal working

Engineering services (construction, painting, and design)

Basic chemicals

Beverage bottling

Human Capital



Social and **Relationship Capital**



Intellectual Capital



Manufacturing Capital



Financial Capital



Natural Capital

Further performance improvement and transcendence of electronic devices such as smartphones

Further spread of AI and realization of an AloT society

New mobility society created by high-performance batteries and autonomous driving Supporting life from space and the sky

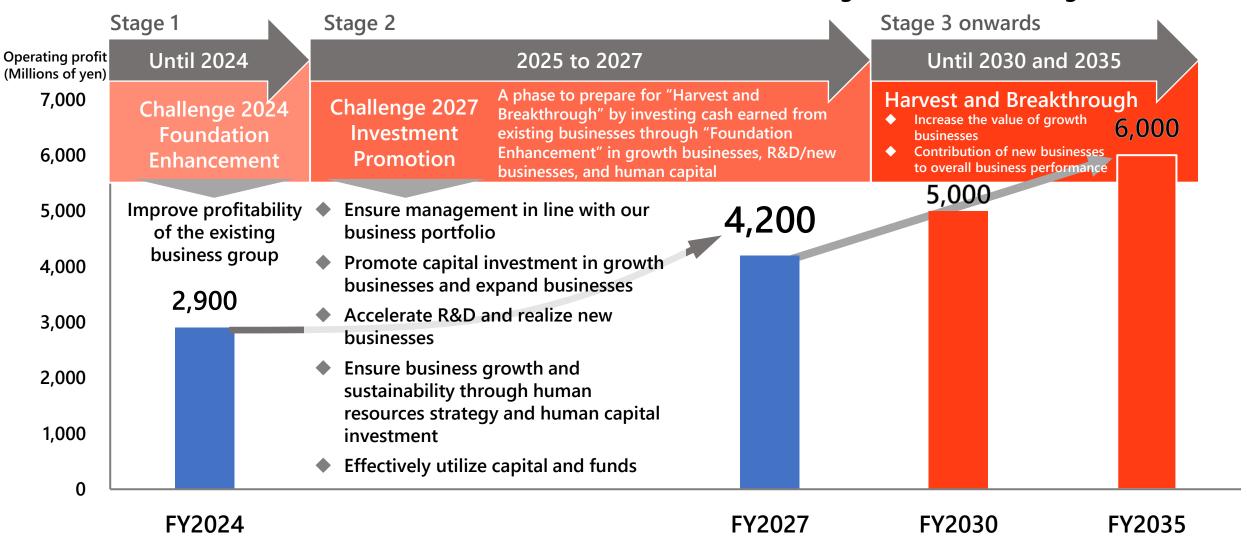
Further spread of clean energy to achieve carbon neutrality

(Life sciences sector)

Growth Vision of Carlit



◆ Position of the Growth Vision towards 2035 and the Mid-Term Management Plan Challenge 2027



Business Portfolio Reviews



Reviewed business portfolio in light of the initiatives under "Challenge 2024" period and changes in the internal and external environment

Priority Area

◆ An area that has both Focus Area businesses that are expected to further earnings growth and Development Area businesses that are expected to shift to the Focus Area

Addition

Space and defense solid propellants

Ammonium perchlorate

Development Area

Review

- ◆ Businesses in this area are expected to shift to the Focus Area
- ◆ Allocation of resources needed required to accelerate growth

Electrodes and electrolysis-related products

High value-added silicon wafers

High-performance electrolytes and conductive polymers

Focus Area

◆ An area where further earnings growth is expected

Review

◆ Concentrated resource for growth

Battery testing Hazard assessment testing

Base Area

- ◆ An area that contributes to stable corporate value enhancement
- ◆ Allocation of resources needed required to sustain business over the long term as a source of revenue

Metal working

Explosives and signal flares

Beverage bottling

Ceramic abrasive grain

Engineering services

(construction, painting, and design)

- ◆ Establishment of "Priority Area" Newly established are businesses of solid propellants used for space development and defense applications and their raw material, ammonium perchlorate, as "Priority Area"
- ◆ Review of "Focus Area" Expansion construction at each test laboratory is in progress. "Battery testing and hazard assessment testing," expected to further earning growth, was shifted from the Development Area
- ◆ Review of "Development Area" Continue development of high value-added small-diameter silicon wafers. "High valueadded silicon wafers" that will be converted into high-profitability businesses in the future

Started full-scale R&D to realize next-generation energy and creating value using the core technology "electrodes and electrolysis"

"High-performance electrolytes and conductive polymers" that can provide power-saving properties for smartphones and AI server components are expected to increase demand from 2025



Challenge 2027: Stage 2

Growth Strategy by Business Segment

Optimization of Business Portfolio



Optimization concept for the three years of the Mid-Term Management Plan "Challenge 2027"

Priority Area Space and Space and defense Ammonium defense Achieve mass production of solid propellants perchlorate solid propellants "solid propellants" in the development stage. Towards Development high-profit business **Electrodes and** Battery testing **Focus Area** Area (→ P.16, P.22, P.28) electrolysis-related Hazard assessment testing products High value-added High value-added "Electrodes and electrolysissilicon wafers silicon wafers related products" will remain in the development stage High-performance **High-performance** during this Mid-Term electrolytes electrolytes **Growth potential** and conductive polymers and conductive polymers Management Plan period. Aim for high profitability towards 2030 Base Area $(\rightarrow P.31)$ **Explosives and signal** Metal working Metal working flares Beverage bottling Beverage bottling **Engineering services** (construction, painting, : Current portfolio position and design) Ceramic abrasive Ceramic abrasive grain grain : Target portfolio position

"Ammonium perchlorate," which is already a high-profit business, is expected to grow further with the completion of construction to increase production capacity in FY2027 (→ P.16)

Realize "high value-added silicon wafers" and "high-performance electrolytes and conductive polymers" that meet market demands and convert them into high-profit businesses during this Mid-Term Management Plan period (→ P.18 to 19, P.30 to 31)

Planning new business strategies and efficiency/energy-saving investments in several Base Area businesses.

Continue to increase profitability $(\rightarrow P.20 \text{ to } 23)$

Profitability

Space and Defense Solid Propellants (Ammonium Perchlorate)



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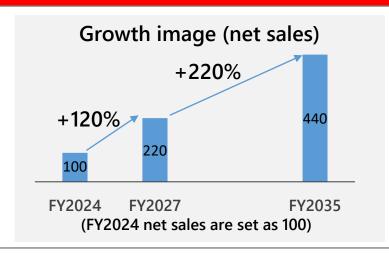
- The only domestic industrial manufacturing facility, manufacturing know-how cultivated since its founding Expertise handling know-how for explosives and hazardous materials
- Use of electricity from hydroelectric power plant (Koto Hydroelectric Power Plant)
- In-house development and manufacturing of electrodes exclusively for ammonium perchlorate production

Assumed operating profit ratio: 10 to 30%

Key Markets and Positions

- Space industry applications...Solid propellants for H3 rocket and Epsilon rocket (sold as ammonium perchlorate)

 Solid propellants for private rocket (KAIROS)
- Defense applications...Solid propellants for defense-related products
- The only industrial producer of ammonium perchlorate in Japan
- Cannot be sold overseas. Domestic consumption only (End products may be exported)



- Large-scale capital investment aimed at 2 to 3 times the current production capacity is underway (1st phase construction completed)
 2nd phase construction: Scheduled for completion in the first half of FY2026
 3rd phase construction: Scheduled for completion in the second half of FY2026
 Full operation: Scheduled from FY2027 onwards
- Expect increased demand under the situation of the global expansion of the space business and the upward trend in Japan's defense budget
- Start full-scale development of "solid propellants" in addition to solid propellant raw materials (Refer to P.22, P.28)

 Start considering the expansion of industrial land in line with the expansion of the business

Battery Testing and Hazard Assessment Testing



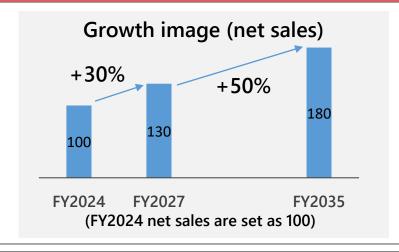
Business Strengths

- Services utilizing the location of the Akagi Plant (explosives manufacturing plant) and handling/assessment know-how of hazardous materials
- Possible to consistently evaluate both "danger/safety" and "cycle performance" in batteries
- Hold events such as "hazard assessment seminars" based on extensive knowledge. Conduct enlightenment and PR activities

Assumed operating profit ratio: 30 to 50%

Key Markets and Positions

- Battery assessment testing...Cycle testing and storage testing of various batteries such as Li batteries
 - Contracted by various manufacturers developing batteries
- Hazard assessment testing...Hazard assessment of new substances based on fire service law and UN recommendations
 - Contracted by various manufacturers, including chemical manufacturers
- Large-scale hazard assessment testing...The only test capable of assessing large-scale high-risk products in Japan.
 - Contracted by various manufacturers, including machinery and equipment, and batteries
- Top-ranked in Japan in terms of the level of service content, extensive knowledge, and diversity of facilities



- Construction of the new battery testing laboratory building is scheduled for completion in FY2025 (investment scale: approx. 1.5 billion yen)
- Gradually conduct facilities enhancement, mainly at large-scale test sites, for hazard assessment testing
- As a "company handling explosives and hazardous materials," promote human resources development with technology succession as a management issue Aim to add high value through not only the "test result reporting business" but also through the "business of considering results"
- Although overseas in-vehicle battery development has run its course, domestic development demand has not yet waned.
 - Capture market needs by having a wide range of evaluation systems from large batteries to small batteries

High Value-Added Silicon Wafers



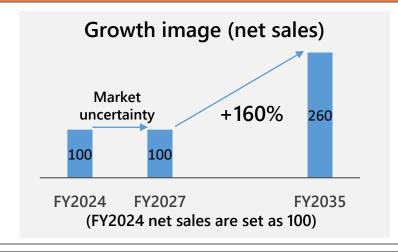
Business Strengths

- Integrated manufacturing from single crystal growth (silicon ingot manufacturing) to cutting and mirror wafer processing
- Development of high value-added products based on the chemical manufacturer's unique R&D system
- · Application of single crystal growth technology to impart properties to silicon wafers and generation of single crystals other than silicon

Assumed operating profit ratio: 10 to 15%

Key Markets and Positions

- 4 to 6 inch silicon wafers...Manufacturing and sales of various wafers to foundry manufacturers and device manufacturers on a custom-made basis for electronic device applications, automotive applications, and industrial machinery applications
- Various value-added wafers such as substrates for power semiconductors and ultrahigh flatness substrates...Provide added value such as high flatness and property imparting during single crystal growth.
 - Respond to development demand in MEMS, RF, and optoelectronics fields, which are important for AloT
- Small-diameter silicon wafers have become a niche market due to a decrease in domestic players.
- Establish a position as a unique manufacturer utilizing integrated manufacturing technology



- Markets such as automotive applications, industrial machinery applications, and power semiconductors, which have many users, continue to have inventory adjustments, and the market is uncertain from 2025 until 2026. Aim to take the offensive as the market recovers
- Investment in single crystal growth facilities and cutting/polishing facilities has run its course. Continue automation investment
- Continue R&D investment and human resource investment. (Refer to P.29) Planning to invest in value-added processing facilities with strong market demand
- Promote the dispersion of human resources through the merger of three companies (October 2024) to secure profits even during the semiconductor market downturn

High-Performance Electrolytes and Conductive Polymers



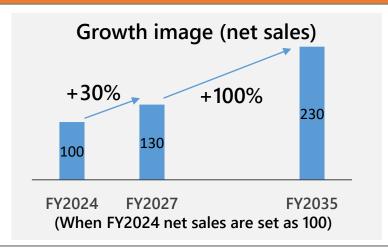
Business	Strengths
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- Applying knowledge of electrochemical technology.
 Manufacturing and sales of "high-performance electrolytes," "conductive polymers," and "perchlorates"
- Development capabilities and product lineup that provide a wide range of properties in response to market needs for Al server components, such as power saving performance and temperature durability
- Development of low environmental impact products

Assume operating profit ratio: 10 to 30%

Key Markets and Positions

- High-performance electrolytes...Electrolytes for electric double layer capacitors
- Conductive polymers...Large to small capacitor materials
- → Both used for components of smartphones, AI servers, etc.
- Top share in the domestic market for capacitor/condenser electrolytes such as electrolytes using high-performance electrolyte SBP-BF4. In a competitive environment with overseas products and alternatives
- Domestic sales and overseas sales (mainly to Asia). Higher ratio of domestic sales



- Manufacturing facilities have sufficient capacity. No large-scale investment is planned except for some upgrades
- Strengthening R&D and product development.
 In addition to developing characteristics that meet market needs, promote development that is conscious of low environmental impact
 (Refer to P.30)
- Respond to social issues and demand backgrounds such as the sophistication of communication devices and AI technology, the diversification of lifestyles associated with it, and the expansion of next-generation mobility such as HVs and EVs.
 Aim for business growth by targeting overseas markets as well

Environment and Strategy of Base Area Business Group: Overview



Chemical Products Segment

- Explosives and signal flares (explosives)
 In principle, the domestic market is the target, and demand fluctuation is small Maintain business by ensuring BCP (including logistics) and fair prices
- Sodium chlorate (pulp bleaching raw material, sodium chlorate herbicide: chemicals)
 - Gradual market decline cannot be stopped, slightly decreasing trend Maintain business by ensuring BCP (including logistics) and expanding applications
- Ceramics
 - Market decline cannot be stopped. Thorough investigation of competitive trends. Promote switching to value-added product

Metal Working Segment

- Heat-resistant metal parts for furnaces (heat-resistant anchors for incinerators and chemical plants, etc.)
 - The domestic blast furnace plant market is mature, and innovation is difficult to expect.
 - Explore electric furnace/environmental protection plants, overseas markets, etc., and find a way to break away from the limited market. Solidify the position as the top manufacturer of environmental parts for furnaces in 2030–35
- Various metal springs and pressed products (washers for automobiles and construction equipment, etc.)
 - Automobiles and the like will have fewer parts in the future. The market environment is tough as resin parts increase.
 - Focus on construction machinery applications, where metal parts continue to be used, and aim for growth

Bottling Segment

- Contract manufacturing of PET and canned beverages
 - Continue contract manufacturing from brand manufacturers mainly for PET bottle beverages.
 - Both personal consumption and inbound demand are steadily progressing, and there are no environmental changes such as a decrease in beverage demand
 - Large-scale remodeling work on the PET bottle line is planned as a save energy investment. Planning to reduce CO2 emissions as well as improve manufacturing efficiency
 - Partial manufacturing stoppage due to this remodeling work is scheduled for 1Q to 3Q of 2026. Although a decrease in performance is expected, aim for recovery and increased profits in FY2027

Engineering Services Segment

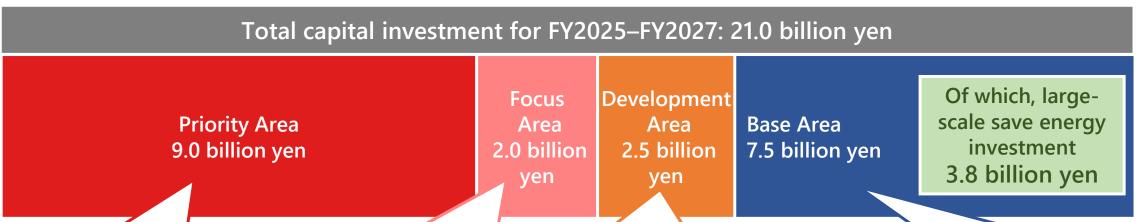
- Industrial paints and painting work (contract painting, sales, etc. for construction machinery)
 - Focus on highly profitable contract painting. Strengthen sales to develop new customers
- Engineering and construction work (in-house contract construction, electrolysis plant facilities, etc.)
 - Internal construction projects are increasing due to increased investment in the Chemical Products Segment
- Structural design (design of water supply and sewerage facilities and private facilities, seismic diagnosis design, etc.)
- Design for public and private sectors is stable. Whether or not private sector design projects can be acquired is crucial
- Promote business efficiency through the development of design engineers and the promotion of DX

頼と限りなき挑戦

Capital Investment Aligned with Business Portfolio



Promote capital investment as part of the "Investment Promotion" stage toward the 2030–2035 vision



- Investment in increased production capacity
- Investment in new production facilities

- Investment in enhancement and efficiency improvements
- Investment in upgrades and countermeasures for aging equipment

- Investment in new production facilities
- Investment in upgrades and countermeasures for aging equipment
- Investment in upgrades and countermeasures for aging equipment
- Energy-saving and labor-saving facilities
- Investment in improving labor conditions

(From investment in Priority, Focus and Development Areas: 3.5 billion yen confirmed from the previous Mid-Term Management Plan)

(From investment in Base Area: 1.0 billion ven confirmed from the previous Mid-Term Management Plan)

Implement thorough business portfolio management and promote ROIC (IRR)-based capital investment

- → Capital investment in the Priority, Focus and Development Areas is expected to generate high profitability and future growth
- → The Base Area is expected to improve profitability with emphasis on stable earnings and ESG aspects such as energy efficiency

Growth-Oriented Capital Investment



Gunma Plant Expansion of ammonium perchlorate production and enhancement of the battery laboratory

Ammonium perchlorate plant: Steady execution of construction toward the final year of the Mid-Term Management Plan

First half of 2026......Completion of work to expand and reinforce post-manufacturing process equipment

Second half of 2026......Completion of work to expand the electrolysis production equipment for ammonium perchlorate

Battery laboratories: Second testing building scheduled for completion in FY2025. Continue enhancement of in-house testing equipment based on demand

- ✓ Increase capacity through additional testing locations
- ✓ Expand sample size compatibility through facility expansion and improve customer satisfaction

Reinforce production facilities and testing labs to ensure stable supply and business expansion

Nagano Plant Value-added enhancement of silicon wafers and investment in automation

High-value-added facility: MEMS and RF, etc. (discrete field)

Targeting the optoelectronics field

- Installation of polishing and inspection devices for manufacturing high-flatness products
- Consideration of film deposition and lamination equipment for silicon wafers

Automation and facility enhancement: Automation of surface grinding and polishing processes, reinforcement of cutting processes

- ✓ Stabilization of quality
- Labor reduction and accelerated production speed
- ✓ Countermeasures for aging equipment

Strengthen market competitiveness and achieve one-of-a-kind product positioning through high-value-added products Improve profitability through enhanced production efficiency and labor reduction

Akagi Plant Automation of the base flare plant and establishment of new manufacturing facility for solid propellants, a priority business

Flare plant: Automotive emergency flare (SUPER HIFLARE)

Promote automation of the process of powder loading, inspection, and transportation for highway signal flares (ROAD FLARE)

- ✓ Labor reduction and accelerated production speed
- ✓ Countermeasures for aging equipment
- ✓ Creating a safer and more worker-friendly explosives plant

Solid propellant manufacturing facility: Aim to shift from a pilot plant to a full-scale production facility

- Build new manufacturing facility capable of producing multiple product lineups
- Build new inspection and inventory facilities to support business establishment

Enhance the plant's capabilities to produce safety products from flares to solid propellants

Energy-Saving Capital InvestmentAchieving Carbon Neutrality



 Implement large-scale save energy investment in the Bottling Segment

Switch from "Hot Pack" to "Aseptic" for beverage production lines

Hot Pack Line: Sterilizes PET bottles using high heat

- √ High energy consumption
- ✓ Only produces heat-resistant PET bottles (high resin usage)

Aseptic Line: Fills beverages in a sterile environment

- ✓ Low energy consumption
- Produces lightweight, thin PET bottles, reducing environmental impact
- ✓ Reduction of CO₂ emissions during transportation through integrated PET bottle molding

Achieve significant CO₂ reduction by switching lines (Scope 1, 2)

CO₂ reduction: 3,050 t-CO₂/year

Crude oil reduction: 1,650 kL/year

Continue to examine and promote initiatives towards carbon neutrality

Scope 1, 2
Promote energy savings
and creation

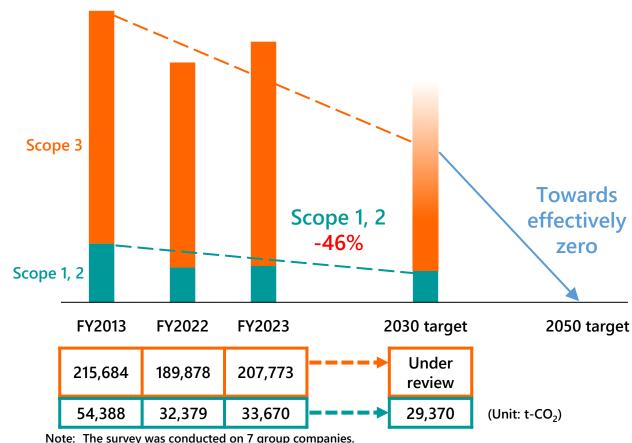
Scope 3
Enhance promotion
across the supply chain

- Introduce high-efficiency, energy-saving equipment
- Improve production and business processes
- Efficient use of hydroelectric and solar power
- Promote sustainable procurement
- Contribute to energy saving through new product development

GHG emission trends and reduction targets

FY2030 46% reduction (Scope 1, 2)

FY2050 Formulate a transition plan to achieve carbon neutrality



 The survey was conducted on 7 group companies.
 Results from Carlit Holdings, Japan Carlit, Silicon Technology, JC Bottling, Namitakiko, Toyo Spring Industrial, and Fuji Shoji

Profit Plan for Overall Businesses



Overall business growth plan during the Mid-Term Management Plan Challenge 2027

	Cha	hanges in actual result		Changes in actual result Net sales		Net sales	Challenge 2027
	FY2022	FY2023	FY2024	Priority Area	FY2027		
Not color	26 0 h:ll:	26 F h:ll:	20 0 billion was	+2.0 billion yen	42.0 billion van		
Net sales	36.0 billion yen	36.5 billion yen	38.0 billion yen	Focus Area	42.0 billion yen		
Operating profit	2.64 billion yen	3.35 billion yen	2.90 billion yen	+1.0 billion yen Development	4.2 billion yen		
Operating profit ratio	7.3%	9.1%	7.6%	+500 million yen	10.0%		
ROE	7.0%	7.4%	7.4%	Base Area +500 million yen	8.5%		

Thoroughly manage the business portfolio in accordance with risk and opportunities keeping close eye on the internal and external environment

Continue to practice management with an awareness of the capital costs and aim for business growth towards the "Harvest and Breakthrough" stage in 2030



Challenge 2027: Stage 2

Business Growth by R&D Strategy

R&D in Business Portfolio



Established dedicated research laboratories for each of the Priority, Focus and Development Areas.
 Aim for the expansion of growth businesses and realization of new businesses

Akagi **Priority Area** Space and defense solid Ammonium perchlorate Laboratory propellants **Development Area** Established research laboratories for the Nagano High value-added silicon growth of each area Laboratory wafers → Special silicon wafers for nearfuture devices Gunma **Focus Area Electrodes and electrolysis-**Laboratory related products **Battery testing** → Shift to green energy Hazard assessment testing Gunma **High-performance** electrolytes Laboratory Business growth through and conductive polymers "capital investment" → AI and automotive low-power applications and "personal enhancement"

The Role of R&D

Expansion of Priority, Focus and Development Area businesses

 Further deepening of in-house technology and product development

Realization of new businesses

= Technology and product development in new fields and markets

Base Area

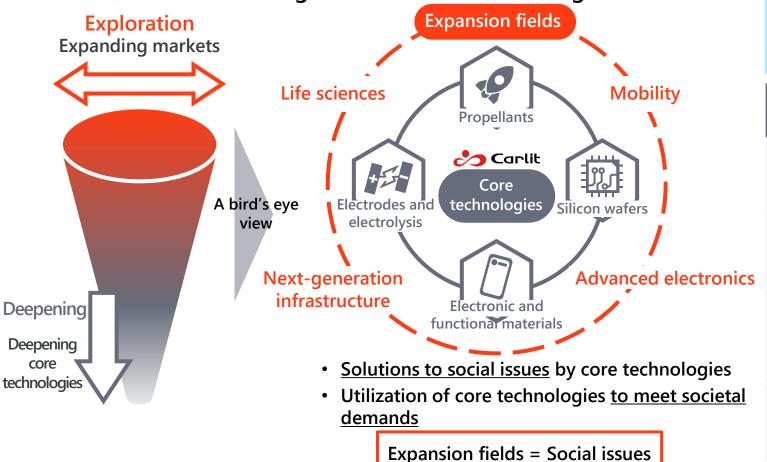
Aim to improve productivity and technological capabilities in existing businesses (not included in R&D scope)

R&D Vision



Transform core in-house technologies into a continuously growing entity

Create core technologies that will continue to grow



Keywords for the Mid-Term Management Plan **Green Innovation**

Carlit's core technologies—essential for supporting carbon neutrality—include electrodes, hydropower, and energy-efficient optoelectronics

Core technologies	Towards Green Innovation	Keywords
Propellants	Produced with use of seawater and <u>green</u> energy (Hydropower and solar power)	Space and defense
High value- added silicon wafers	Towards <u>green</u> devices: innovations in FZ→CZ wafer manufacturing technology and energy saving technologies	Next- generation semiconductor devices
Electrodes and electrolysis	Conversion of solar power into green hydrogen	Next- generation energy and carbon neutrality
Electronic and functional materials	Expansion of energy-efficient devices for <u>green</u> vehicles	AI, mobility

Space and Defense Solid Propellants: Akagi Laboratory



Transform solid propellant manufacturing technology, developed through years of R&D, into our new core business.

Our strengths

The only domestic manufacturer of solid propellant raw materials, possessing a specialized production facility for handling hazardous materials.

A dedicated R&D team enabling rapid technological development.



Akagi Plant

Development status

Capable for full-scale manufacturing using a dedicated pilot plant.

Verified combustibility through the ground combustion

Ground combustion test in progress

Launched test sales for solid propellants.

Development and investment plan

Main objective: Mass production of solid propellants (rocket motors) for commercial space and defense applications

Development of new mechanisms for defense and commercial space applications Establishment of mass production for commercial space demand

Equipment for increased production capacity

Establishment of mass production for defense applications

Our vision for 3 years ahead Address demand for small satellite launches and defense applications. Launch solid propellant manufacturing and sales business.

- Mass production of motors for space and defense applications
 - **◆** Target for new product creation: 5 items

High Value-Added Silicon Wafers: Nagano Laboratory

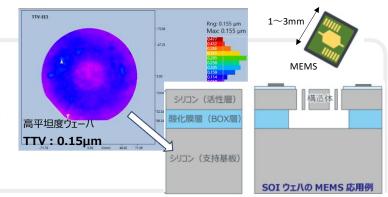


Conduct R&D to meet the "special wafer customization requirements" of near-future devices.

Development products

- Ultra-high flatness products for stacking
- High-frequency application products
- Coated and stacked products

- High-flatness wafers $\leq 0.2 \mu m TTV$
- High-resistance CZ wafers $[\geq 5,000 \Omega cm]$
- Various special coated wafers



Development and investment plan

Main objectives: Conduct R&D on multiple new products for MEMS, filters, and optoelectronics. Achieve mass production.

Meet demand for specialized customized wafers for new devices.

Development and mass production of coated products Significant improvement in flatness

→ Development of stacked products

Sales of stacked products

Our vision for 3 years ahead Develop and expand applications for specialized wafers for MEMS, filters, optoelectronics, and power devices.

Increase silicon wafer sales volume by 50%.

Patent application target: 15 Target for new product creation: 5 items

High-Performance Electrolytes: Gunma Laboratory



Conduct R&D aimed at integrating and innovating materials for capacitors and capacitive components.

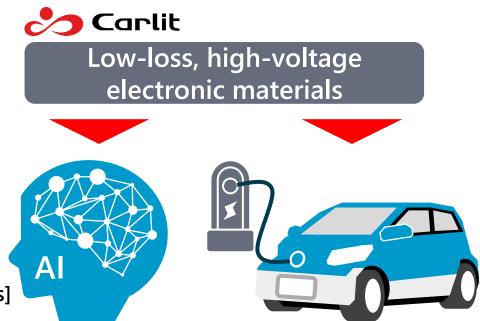
Our status

- Our products are used in various devices, including PCs.
- The market presents an opportunity with the emergence of many new devices. Material upgrades are also necessary.
- In particular, AI and HEV/EV-related markets are expected to see significant growth.
- Business expansion requires the acquisition of new markets through the renewal of inhouse products.

Development plan

Target market: AI, HEV/EV materials

- There is a demand for electronic materials that enable low loss and high voltage (low power consumption) [Conductive polymers, PFAS-free high-performance electrolytes, additives]
- Select and develop materials that enhance functionality and surpass existing materials based on market needs



Our vision for 3 years ahead

Launch AI and HEV/EV-oriented materials to support next-generation device market expansion. Develop materials that achieve low loss and high voltage, driving technological advancement.

Patent application target: 20 Target for new product

creation: 8 items

Electrodes and Electrolysis-Related Products: Gunma Laboratory



Develop innovative electrodes for storing, converting, and utilizing solar power.

Our strengths

As a company founded on salt electrolysis, we have accumulated extensive knowledge and technological expertise in electrolysis and electrodes through years of technological development.



External factors

"Green hydrogen," produced via water electrolysis powered by solar energy, is gaining attention as a key factor in achieving carbon neutrality. The market demands innovative electrodes for more efficient electrolysis.

Development plan

Target market: Next-generation energy field (power conversion to hydrogen, electrodes for energy storage devices)

- Developed an in-house PEM* electrolysis cell for hydrogen production.
- Aiming for social implementation of electrodes for hydrogen production, conduct scale-up and development.
- Continue to enhance the performance of electrodes for energy storage devices.



Our vision for 3 years ahead

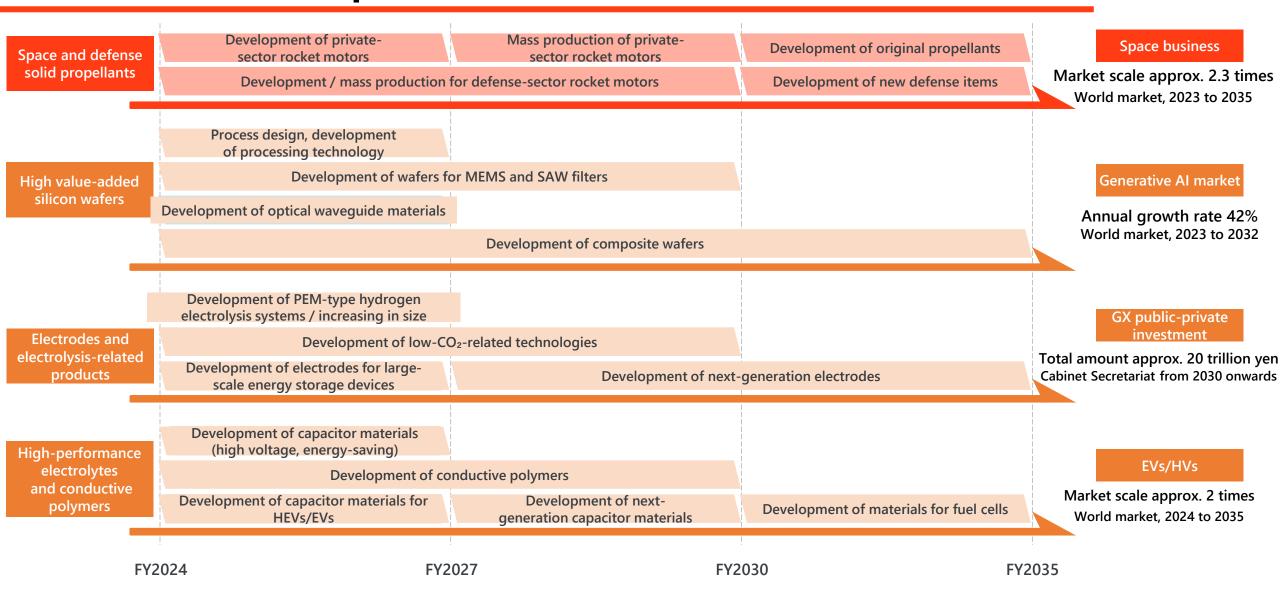
Strengthen our recognition and showcase our technologies in the next-generation energy field by deepening our electrode technology.

Advance R&D of hydrogen generation cells to reach the stage where mass production planning is expected.

Patent application target: 15

R&D Roadmap Toward 2035







Challenge 2027: Stage 2

Growth by Human Resources Strategy

and human capital investment

Ideal Human Capital in Growth Strategy



Ideal human resources strategy to achieve Carlit Group's vision

Sustaining Focus and Base Areas and securing profitability

Expanding Priority and Growth Areas and establishing new businesses

Expanding R&D

Realization of

"Ideal Carlit Group in 2035"

- Solutions to social issue and value creation
- Realization of a growing business portfolio
- Operating profit plan: Achieving 6.0 billion yen by 2035

Recognize human resources strategy and human capital investment as key management issues to achieve our vision

> "Acquire" human capital to sustain businesses and support the expanding future

"Foster" human resources to drive company growth and create new businesses

Strive for infinite challenges and ensure diverse human resources can "thrive"

- Securing stable human capital in line with growth strategy, automation/efficiency plans, and succession plans
- Implementing agile hiring strategies that match the business and human resource portfolios
- Revitalizing and early development of next-generation executives and management personnel
- Developing and securing "specialized" human resources in each department
- Fostering human resources for digitalization who can address the increasing sophistication of cybersecurity and IT transformation
- Establishing systems, workplace environments, and corporate culture that are condactive diverse talent
- Fostering an attitude of proactive "challenge" and a mindset of contributing to the team among employees

Human Resources Strategy: Acquisition, Development, and Success



	What we should do	Key initiatives (KGI)	Targets (KPI)	Investment scale
Acquisition	 Enhancing human resources in line with business expansion in Priority, Focus, and Development Areas (new graduate and career talent hiring) Fulfilling specialized, digital, and business development talent needs (career talent hiring) 	[New graduate hiring] Strengthening company branding to enhance attractiveness and brand awareness [Career talent hiring] Focus on hiring of talent in technical and corporate fields (IT, finance, legal, etc.) Includes foreign talent recruitment	[New graduate hiring] • 80 hires/3 years • Brand recognition +10% (through various surveys) [Career talent hiring] 20 hires/3 years (limited to priority areas)	From 400 million yen
Development	 Early selection and strategic development of core human resources (Understanding individual employee personalities and ensuring optimal placement) Development of specialized human resources (Promoting knowledge transfer from veteran employees, enhancing compensation for specialized human resources) Development and strengthening of human resources for digitalization 	 ✓ Talent management and optimal placement using 1-on-1 meetings, personnel records, and 360-degree evaluations ✓ Continuous optimization of the personnel evaluation system. Further enhancement of systems for specialized human resources ✓ Enhancement of reskilling programs 	 Establishing a structured talent management approach for core workforce (ages 30–40) Developing and implementing evaluation and compensation systems for specialized human resources Review and optimization of training programs Training hours: 400–500 hours Reskilling programs expansion +25 programs/3 years 	From 300 million yen
Success	 Creating an environment in which all employees can work comfortably, grow and thrive Selection and promotion based on ability and motivation, embodying "For Confidence and Infinite Challenges" Developing systems to maximize the team and organizational potential 	 ✓ Fostering a corporate culture and awareness that support diverse human resources ✓ Utilizing new evaluation systems to clarify goals and ensure fair compensation for leaders, managers, and key players → Promoting a strong team mindset and maintaining high motivation levels 	 Maintaining the Outstanding Health Management Organization certificate Percentage of female managers 5% Percentage of female managerial candidates 20% Employee engagement 70% 	From 300 million yen

^{*} Total investment scale aligned with the three-year Mid-Term Management Plan

Maximizing a Thriving Work Environment and Respect for Human Rights



 Create an environment where employees can perform at their best through workplace improvement and health initiatives

Maintaining the Outstanding Health KPI: Health management **Management Organization certificate Initiatives** Management challenges **Evaluation** Specific health Maintenance and promotion quidance, etc. of physical and mental health Increased productivity Health risks mitigation (stress checks, etc.) **Employee success** Mental health Improvement in employee engagement promotion Our growth Work system reform Optimization of working hours Realization of our Vision promotion

Acquisition of childcare leave

- ✓ Promotion of parental leave acquisition regardless of gender
- → Respect diverse work styles, including parental leave, and promote overall work-life integration

Maintaining a safe and hygienic work environment

- ✓ Promoting occupational health and safety in accordance with the Industrial Safety and Health Act, conducting disaster prevention training
- ✓ Group companies visiting each other's production sites to exchange information
- → Not only preventing major accidents but also contributing to workplace environment improvements

KPI: Acquisition of childcare leave

Maintaining 100% (including male and female employees)

KPI: Number of lost time accidents (cases)

Eliminating occurrences: 0 cases

We respect the human rights of each and every employee as well as all stakeholders involved in our business activities to perform duties

Formulation of company-wide guidelines on human rights and instillation

[Group Compliance Charter (Extract)]

We prohibit unfair discrimination or harassment on the grounds of race, creed, gender, age, religion, nationality, ethnicity, language, place of origin, physical characteristics, disability, or illness in all aspects of our corporate activities, and shall strive to ensure a healthy work environment.

We respect each individual's personal character and individuality. We will evaluate the results of employee work fairly, use the results in fair treatment, and strive to manage personnel fairly in terms of transfers and promotions, etc.

KPI: Implementation rate of human rights training (Domestic G)

FY2027 100%

Initiatives on human rights issues across the supply chain

We have established the Basic Policy for Sustainable Procurement and the Sustainable Procurement Guidelines

Under the section "5. Respecting Human Rights," the following are stated:

- Prohibition of child labor, forced labor, and discrimination
- Appropriate payment of wages
- Respect for employees' rights

KPI: Confirmation of zero human rights violations in the supply chain

FY2030 100%

Promotion of Human Resource Development for Digitalization IT & DX Promotion Cycle



To achieve our vision for 2035, digital transformation across each value chain is necessary

Business activities Transformation of sales and Transformation of production, Transformation of R&D marketing manufacturing, and quality **Our Vision** Upgrading Upgrading core systems core systems Materials informatics, etc. Digital Digital marketing, etc. Smart factories, etc. New core systems, BI tools, AI utilization, data analysis, IoT, low-code development, RPA, etc.

Background

- Operation of new core systems, expansion of cloud usage
- Pursuit of competitive advantage through digitalization
- IT governance/security as a prime company

Specific initiatives

Realization of a high-quality
"IT & DX promotion cycle"

1 Expansion of digital needs from internal and external environments

- Growing demand for efficiency in administrative workplaces
 - (workflow, low-code, RPA for efficiency)
- ✓ Performance analysis and R&D using Al and BI
- ✓ Digitalization of production sites (IoT, smart devices)
- ✓ Rising demand for IT governance and cybersecurity

Start of digital transformation by specialized human resources



- 2 Enhancement of IT utilization and control framework
- ✓ Strengthening of the IT specialist department (IT Promotion Office)
- → Expansion of personnel systems and compensation for specialized human resources
- ✓ Promotion of the introduction and utilization of new core systems and IT infrastructure (BI tools, low-code, AI, latest devices, etc.)
- ✓ Enhancement of IT controls, cybersecurity countermeasures, and BCP measures

Digital transformation requests from various departments

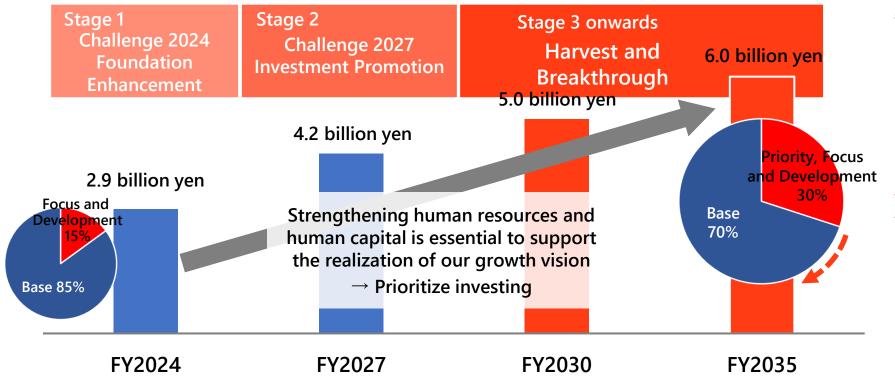
- ③ Promotion of human resource development for digitalization
 - ✓ Company-wide improvement of IT literacy through proactive use of new systems, BI tools, AI, etc.
 - ✓ Security literacy improvement through training such as e-learning and email attack simulations
 - ✓ Promotion of professional certification acquisition (support for obtaining IT Passport, information processing, and security-related certifications)



Carlit's Growth Vision and Human Resources Vision



- Based on our management philosophy of "For Confidence and Infinite Challenges," we will continue to ensure compliance with our Code of Conduct and respect the goals of employees who continue to challenge themselves.
 - ① We are convinced that the growth of each and every employee and the expression of their strengths as human assets of the Carlit Group will lead to ongoing and stable Group development.
 - ② We respect diversity in terms of nationality, race, gender, age, creed, etc., and emphasize mutual acceptance and growth.
 - 3 We will provide opportunities for the Carlit Group's human assets to feel fulfillment and pride through their work and to actively participate with vigor and enthusiasm.



Approach to Base Area

- Ensuring business continuity through human resource acquisition
- Achieving a thriving work environment while fulfilling CSR through respect for human rights
- ✓ Increasing efficiency through IT and DX

Approach to Priority, Focus and Development Areas

- Securing core human resources who embody "For Confidence and Infinite Challenges"
- Creating new innovations by leveraging diversity
- Ensuring human resources for digitalization to support the expansion of new businesses and strengthening cybersecurity



Challenge 2027: Stage 2

Financial Strategy and Capital Profitability

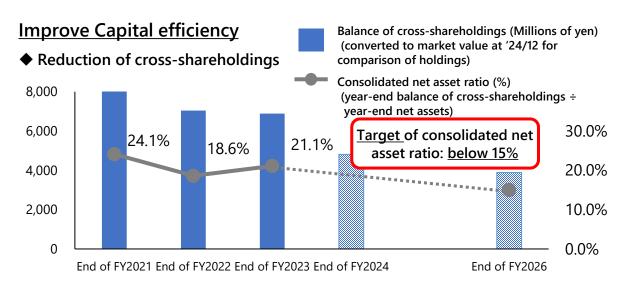
Financial Policy and Strategy



Carlit Group's Financial Policy

Improve capital profitability and capital efficiency to promote the Group's continued growth and corporate value improvement

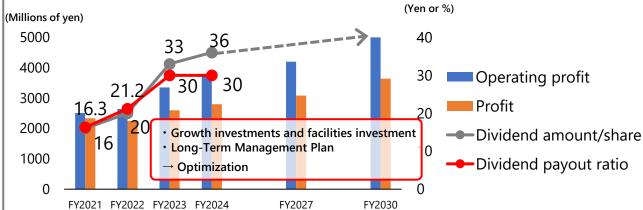
- Improve capital profitability through appropriate capital allocation
- Improve Capital efficiency through reduction of cross-shareholdings
- Realize appropriate shareholder returns keeping the optimal capital structure



- Implementation of various initiatives with an awareness of ROIC-based management
 - Increase in price sales and cost reductions
 - Utilization of surplus fund in our group

Realize appropriate shareholder returns

◆ Dividend payout ratio: 30%



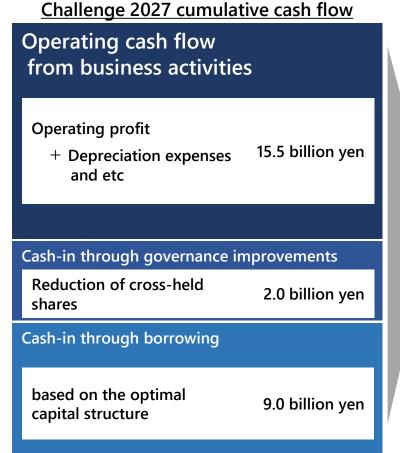
Promotion of IR and SR activities

Develop a system that promptly conveys expectations, requests, and recognized problems from capital markets to management Continue to promote dialogues with investors and analysts to drive corporate value growth

Capital Allocation Concept



- ◆ Realization of revenue expansion by proactive growth investments using borrowing
- ◆ Implementing appropriate shareholder returns based on investment plans



Profit sharing with employees and investment in human capital



Shareholder return concept

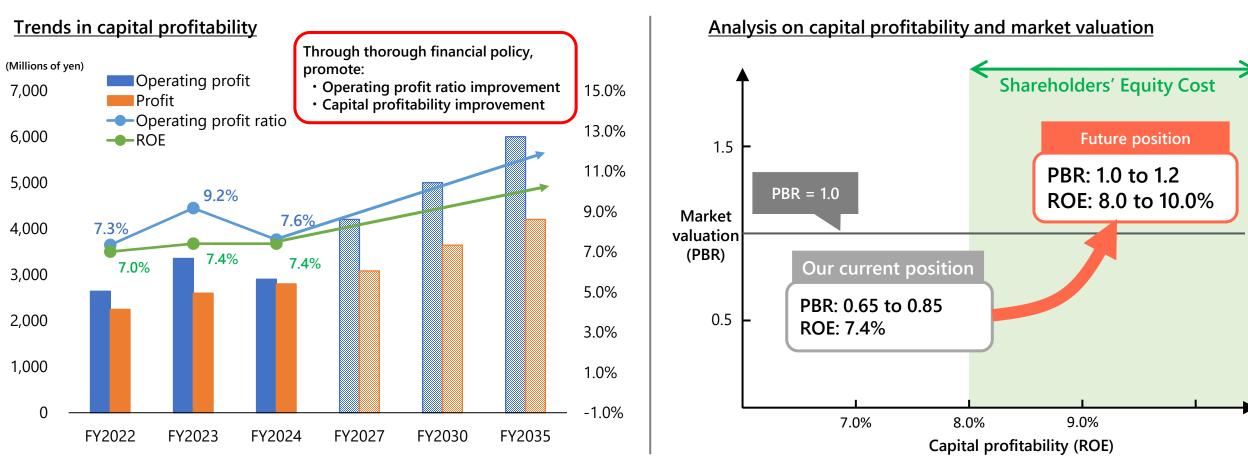
Dividend payout ratio: 30%

- Dividends: Performance-linked stable dividend
- Purchase of treasury shares: Consider based on the impact on growth investments and financial aspects

Capital Profitability and Market Valuation



Consider various measures, analyzing capital profitability and market valuation



Plan to improve market valuation, a key management issue, by enhancing capital profitability based on the financial strategy

For Confidence and Infinite Challenges



Giving Shape to Infinite Possibilities