

'TORAY'
Innovation by Chemistry



**TORAY IR Day
Medium-Term Management Program "IGNITION 2028"**

**Accelerating Innovation Creation
Through Collaboration Between
Technology and Sales & Marketing**

June 8, 2026

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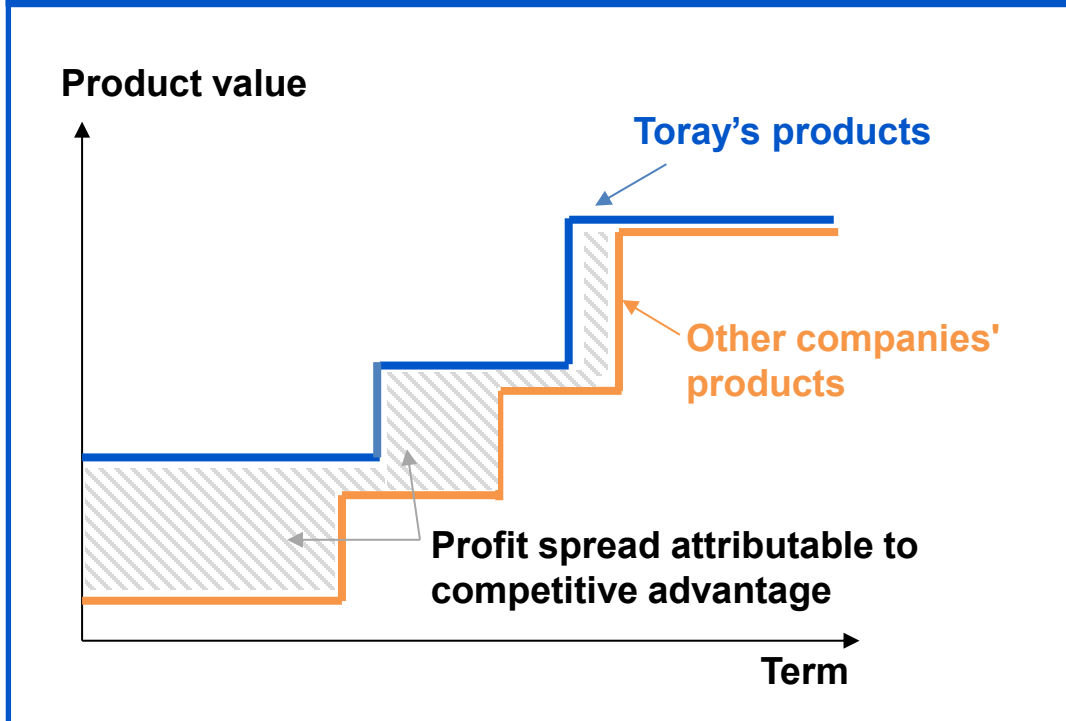
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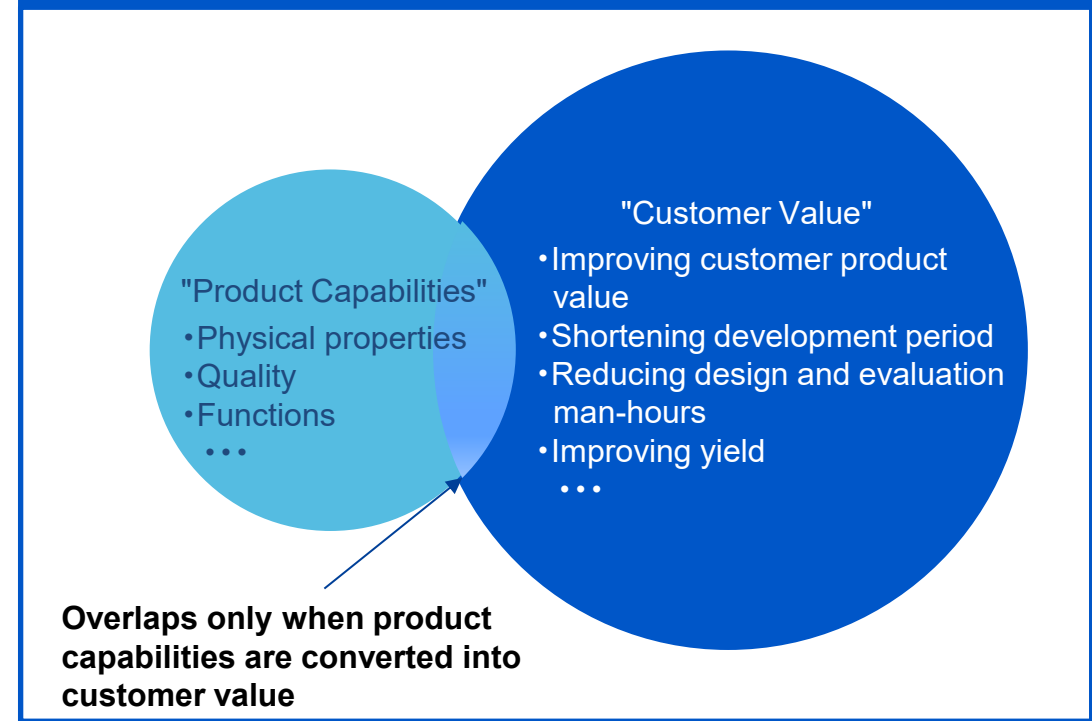
Analysis of the Current Situation Based on Business Environment

The business environment is becoming increasingly challenging, due to the rise of Chinese competitors, commoditization of products, and intensifying price competition, making it difficult to sustain competitive advantage

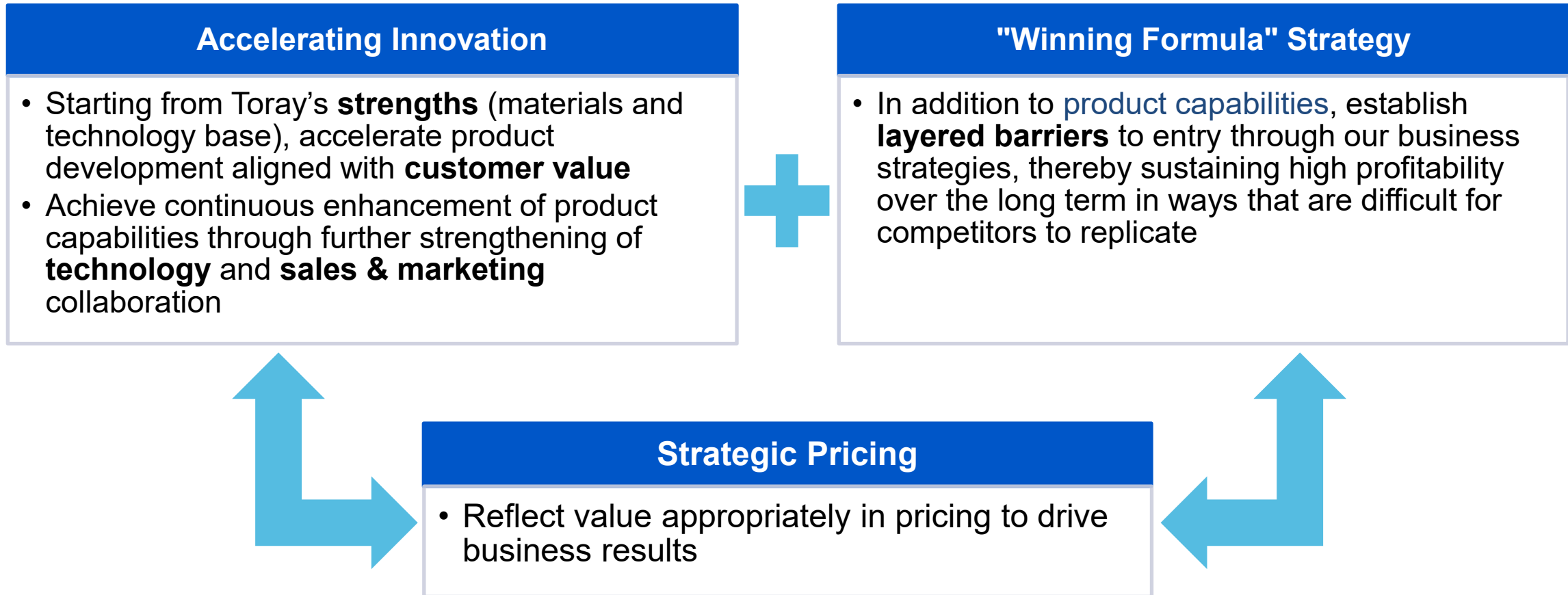
As competitors catch up more quickly, the risk of losing competitiveness in a short period of time is increasing



Enhancing traditional product capabilities alone is insufficient for sustaining competitive advantage



The key to achieving IGNITION 2028 targets lies in driving value creation and translating that value into business results in an integrated manner

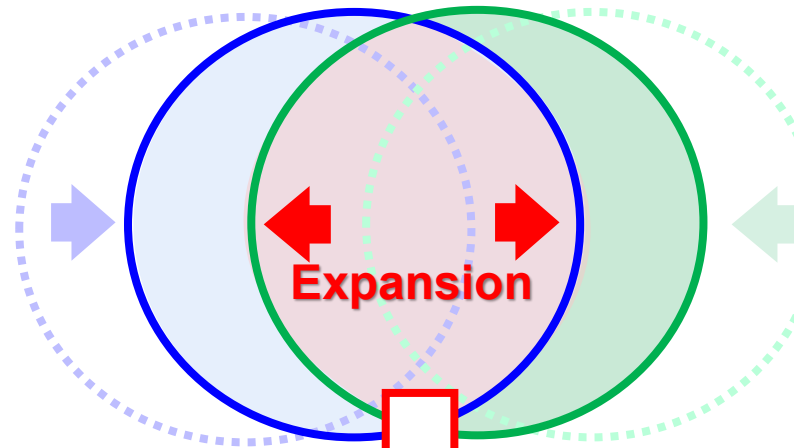




Accelerating Innovation Creation

Creating value by enhancing and expanding collaboration between Research and Development (R&D) and sales & marketing

R&D
(Technology Strategy)



Sales & Marketing
(Business Strategy)

Theme Setting for Growth Areas
(Short and Medium- to Long-Term)

Toray's DNA:
Proprietary Technology,
Pursuit of Ultimate Limits,
Technology Fusion

**Advanced Marketing,
Pioneering Design and Development**

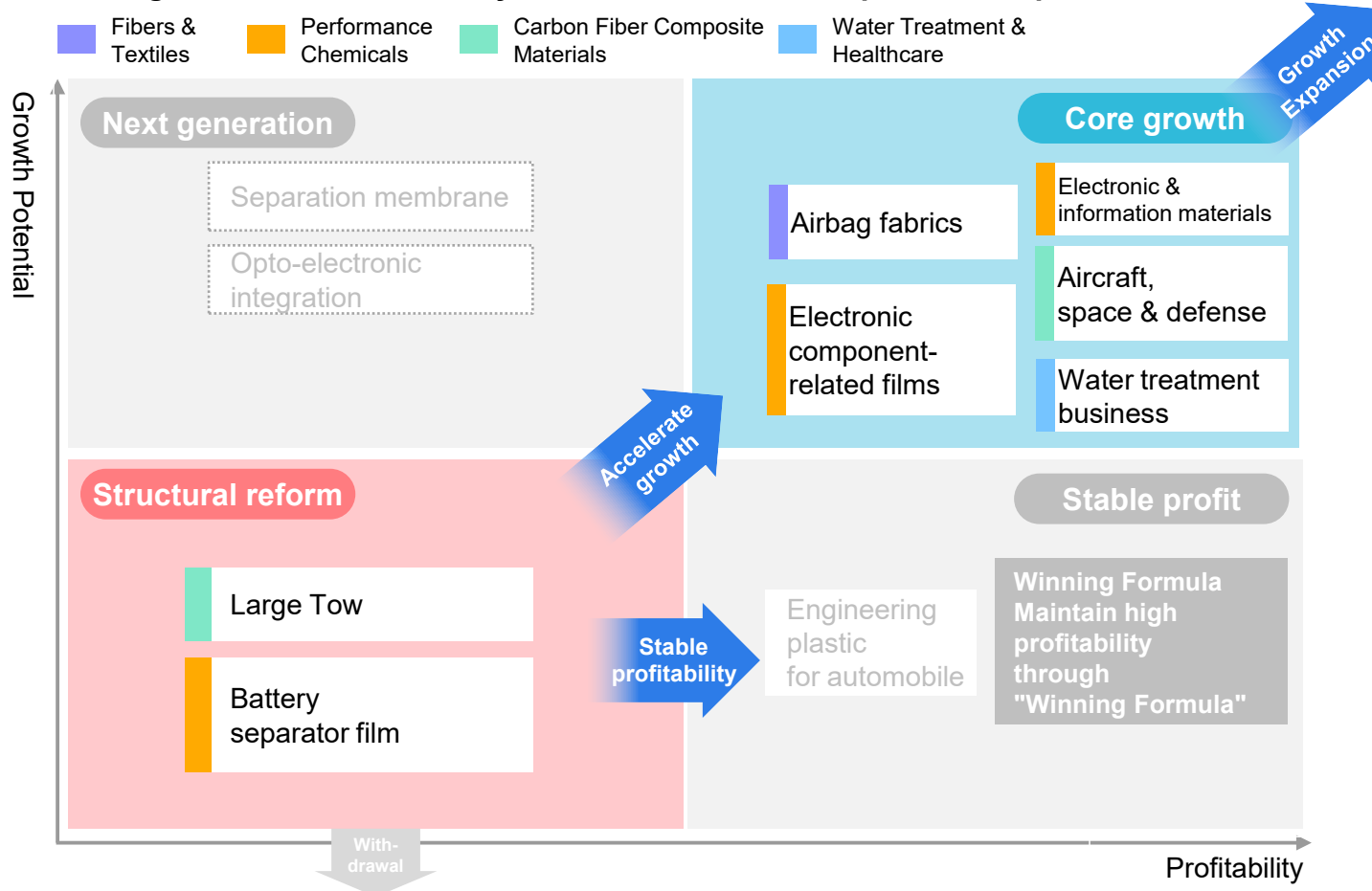
Strategic Partnership

Digital Transformation (DX) and Generative AI

Innovation Creation Project

- Under IGNITION 2028, we promote innovation creation through both growth strategy and structural reform based on four-quadrant analysis of growth potential and profitability.
- In the core growth area, we accelerate innovation through strategic investment for further expansion and secure competitive advantage through "Winning Formula."
- In the structural reform area, we aim to improve and stabilize profitability through production line consolidation and optimal production, as well as application development in growth areas.

*The diagram below focuses only on the businesses and products explained in this session



Core growth

- Accelerate innovation through focused capital investment for further growth expansion
- Build entry barriers and establish sustainable competitive advantage through the "Winning Formula" strategy

(Example)








- Materials for AI data centers (PET film for multi-layered ceramic capacitor (MLCC) manufacturing processes, thin-film inductor coils)
- Reverse osmosis (RO) membranes for ultrapure water production processes

Structural reform

- For improving and stabilizing profitability, not only cost reduction but also promote application conversion to growth areas where Toray's strengths can be leveraged, while promoting application development utilizing existing facilities.

(Example)

- Shift to growth areas and high value-added products (battery separator film, large tow carbon fiber)

| | | |
|-------------------|--|--|
| Core growth |  Airbag fabrics | <ul style="list-style-type: none"> • Optimal production based on demand locations and strengthening global supply structure • Accelerating sustainable material development and advanced functionality development |
| |  Electronic component-related films | <ul style="list-style-type: none"> • Improving customer value of PET film for MLCC manufacturing processes • Achieving fine-line patterning with PET film for DFR |
| |  Electronic & information materials | <ul style="list-style-type: none"> • Promoting thin-film inductor coils using high-precision processing technology • New product development and sales expansion of black materials for OLED displays |
| |  Aircraft, space & defense | <ul style="list-style-type: none"> • Continuing new product development for expanding commercial aircraft market • Expanding share in space and defense, early entry into new applications |
| |  Water treatment business | <ul style="list-style-type: none"> • Continuing expansion and establishing position in water treatment business • Solution development using our proprietary separation membrane technology |
| Structural reform |  Large tow carbon fiber | <ul style="list-style-type: none"> • Promoting cost reduction through optimal production • Capturing expanding opportunities in data center battery storage applications |
| |  Battery separator film | <ul style="list-style-type: none"> • Streamlining battery separator film production systems in line with demand • Structural reform including expansion of high value-added products and development of new applications |

Innovation Creation Under IGNITION 2028: Businesses in the Core Growth Area (1)

Expanding Toray materials across sectors in the AI and semiconductor fields, where growth continues.
Expanding semiconductor materials, as well as manufacturing process films and materials for the infrastructure applications.

Electronic component-related films

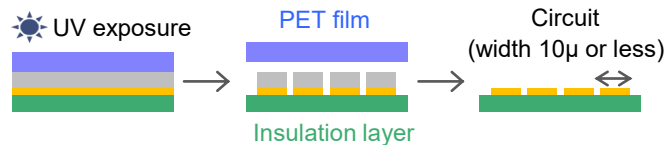
(Film surface design and advanced quality control)

MLCC release PET film

Expanding demand for AI servers, responding to greater compactness and larger capacity



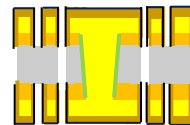
PET film for DFR



Semiconductor wiring miniaturization (defect suppression) response, improving product value

Electronic & information materials

Thin-film power inductor coil

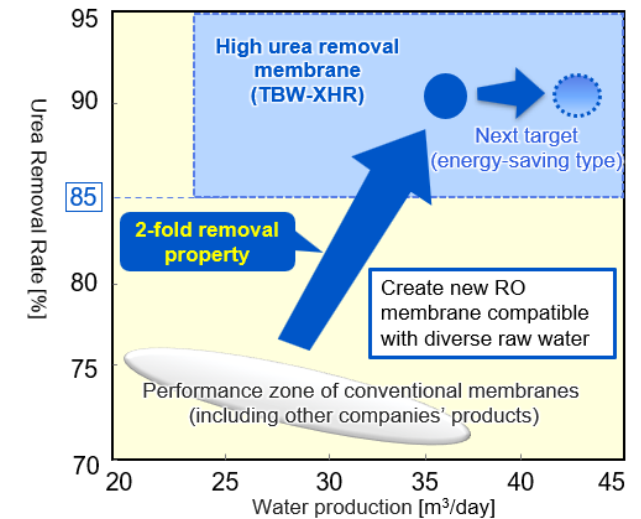


- Substrate via formation
- Pattern copper plating
- Etching, CVD

Leveraging high-precision fabrication technology to service the growing thin-film power inductor coil market

Water treatment business

RO membrane for ultrapure water production process



Contributing to solving challenges in the semiconductor field (e.g., removal of neutral molecules)

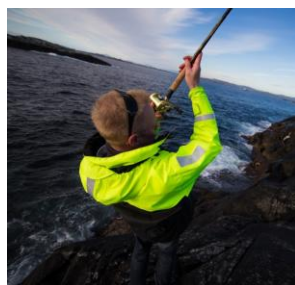
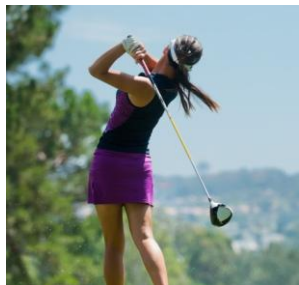
In addition to capturing recovery demand, strengthening the earnings base, and enhancing cost competitiveness, strategically expanding growth drivers (the industrial, sports, aircraft, space & defense applications)

Sports

(Higher profitability through new products and intermediate substrates)



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For steadily growing markets, expanding high value-added, high-margin products

Aircraft

(Expanding market share in growing markets)



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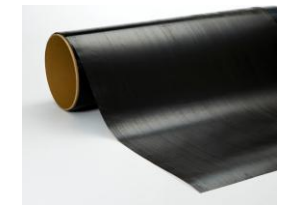


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Steadily capturing the expansion in the commercial aircraft applications (including capacity ramp-up)
Advancing new material certification and preparation for production

Space & defense

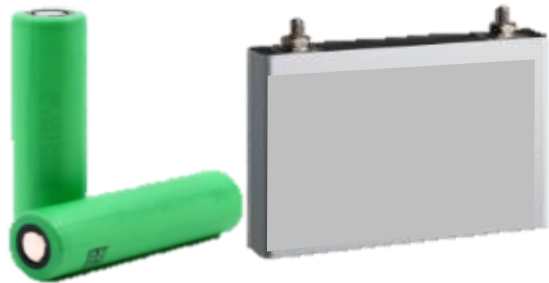
(Accelerating expansion into growth markets)



Expanding high-performance materials including intermediates and finished molded components

Continuing structural reform of the battery separator film business and Zoltek (consolidation of production line and optimization of production).
In parallel, shifting to growth fields and high value-added products, strengthening earnings base through expanding sales of new products and applications

Battery separator film



- Consolidation of production line and at each site
- Structural transformation driven by the establishment of a new facility for ultra-thin capacitors at Nasu Plant
- Shifting away from the battery applications and developing new applications

Large tow carbon fiber (Zoltek)

Precursor filament and staple fiber



Processed products



- Promoting cost reduction through optimal production
- Shifting from carbon fiber sales to pultruded products
- Higher value-added through launch and expanded sales of high-performance new products
- Expanding the data center battery storage applications using flame-resistant fiber



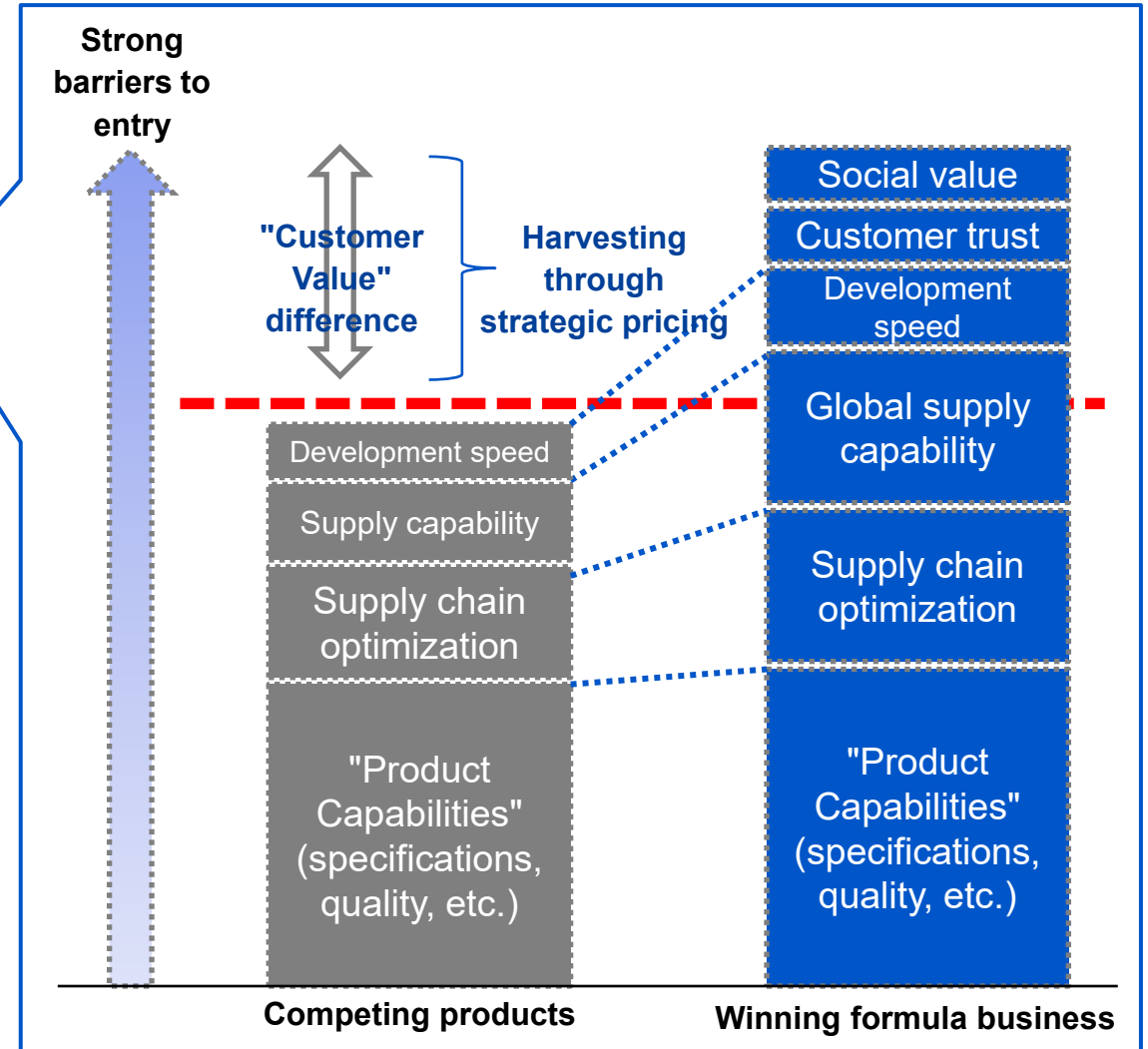
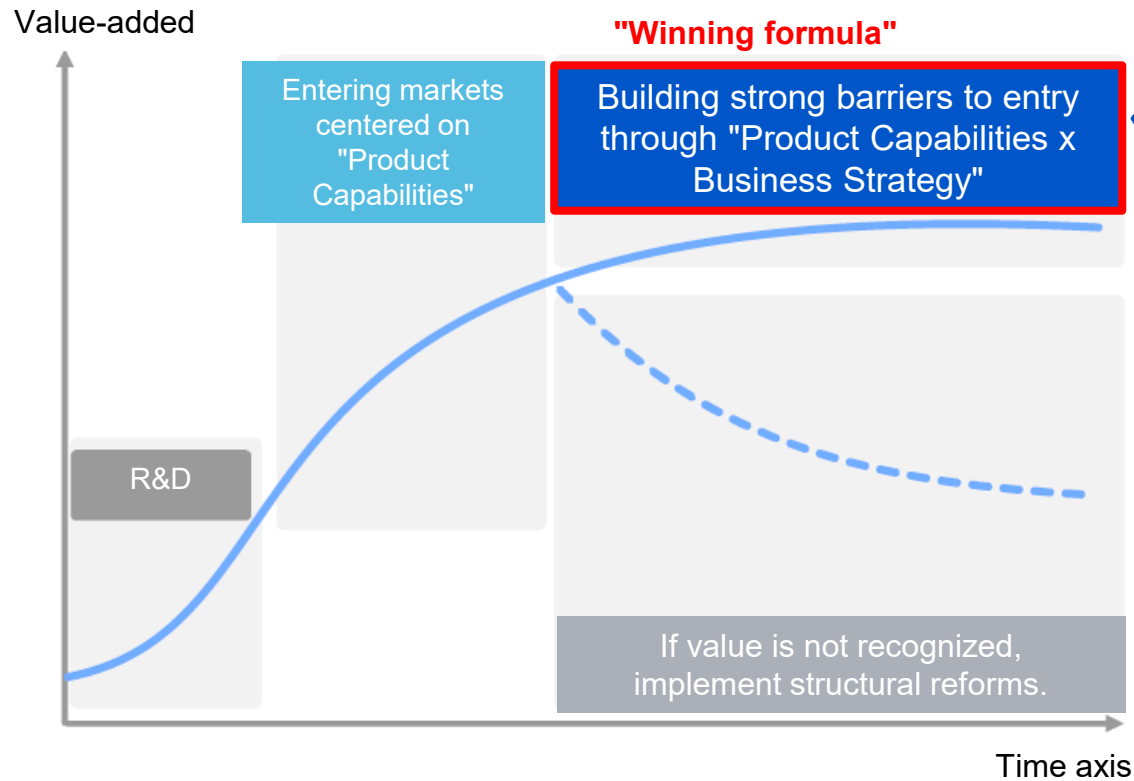
"Winning Formula" Strategy

"Winning formula" Strategy: Building Barriers to Entry Through "Product Capabilities x Business Strategy"

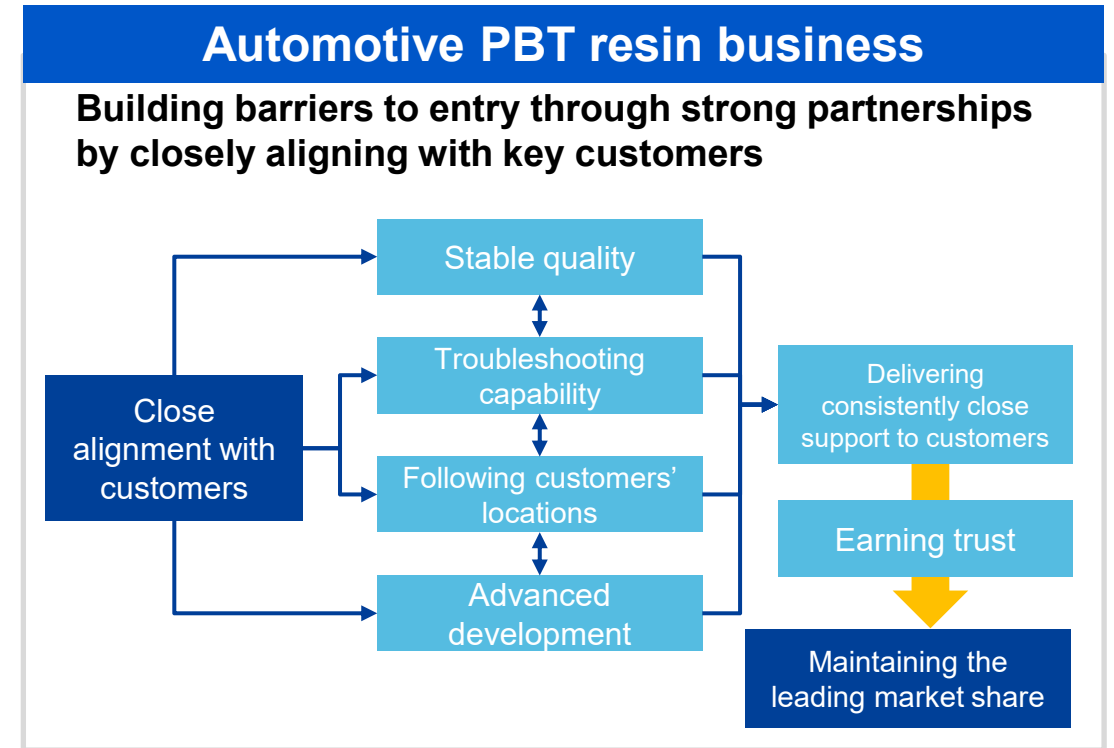
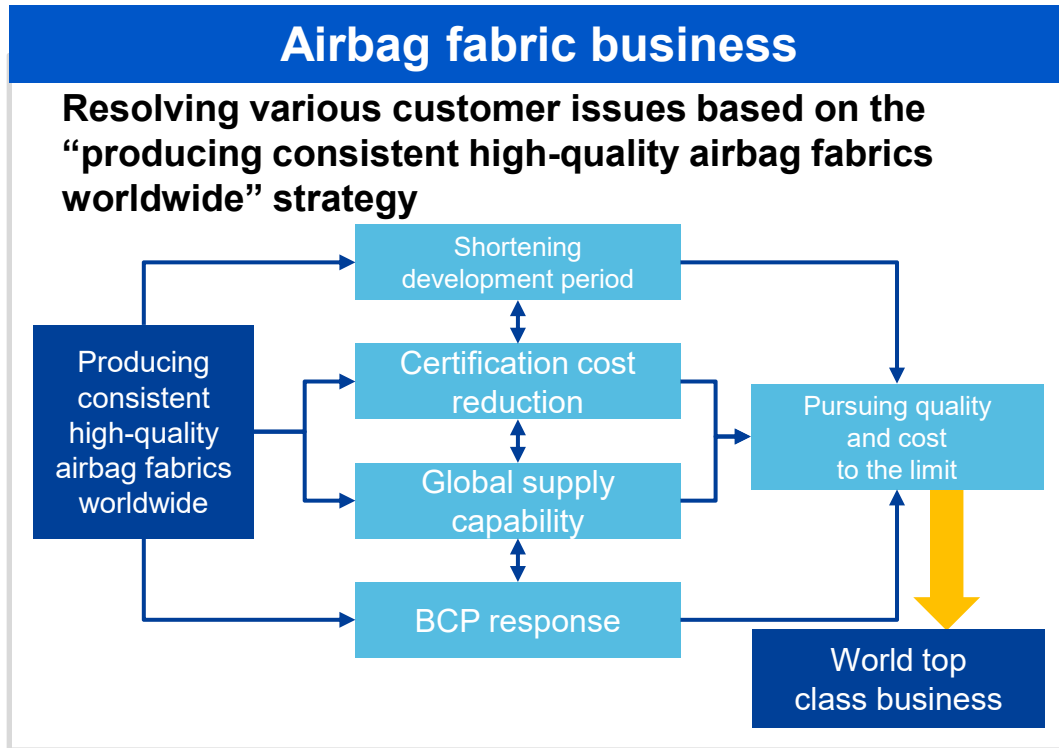
Building strong barriers to entry through business strategy in addition to product capabilities, realizing sustainable competitive advantage

Competitiveness perspective

Can this business remain competitive in the future?



Building winning formula businesses that are difficult for competitors to follow by closely aligning with customers and realizing multi-layered customer value ahead of the industry



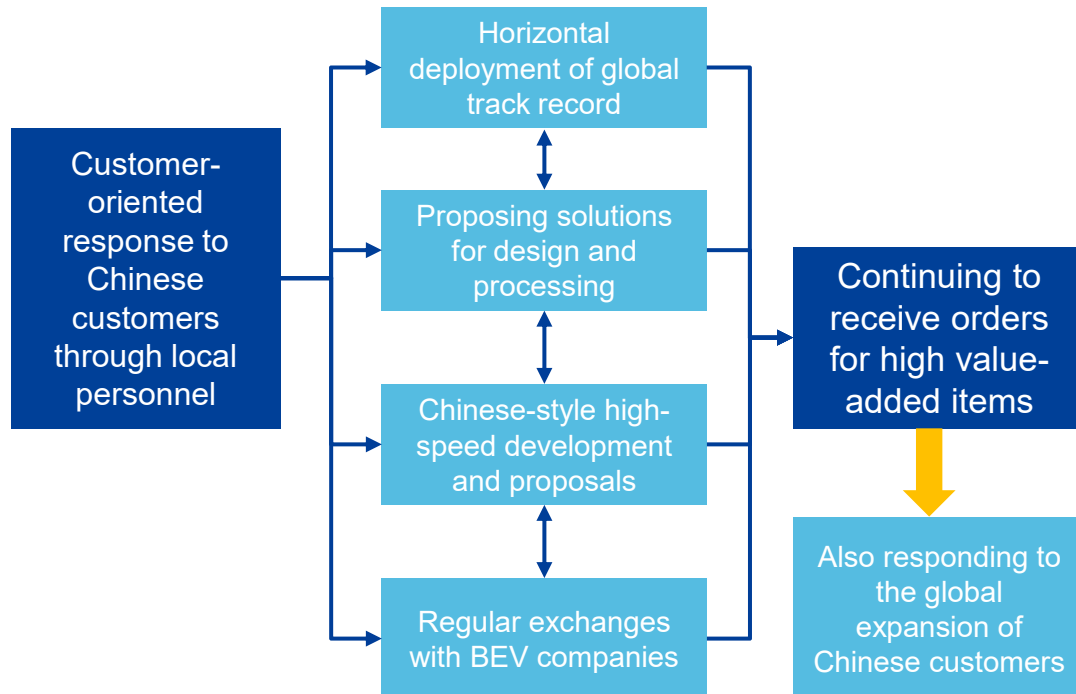
Examples of businesses to be developed into winning formula business under IGNITION 2028

| | |
|--|---|
| Resins for Chinese automobiles | Continuously creating high value-added items through advanced development and organizational capabilities centered on local personnel (P16) |
| Semiconductor ultrapure water production | Expanding market share through membrane development optimized for water sources and collaboration with leading engineering companies (P16) |
| Optical fiber for data centers | Joint development of communication optical fiber using NANODESIGN™ technology with major data center companies (P20) |

Building winning formula businesses that are difficult for competitors to follow by closely aligning with customers and realizing multi-layered customer value ahead of the industry

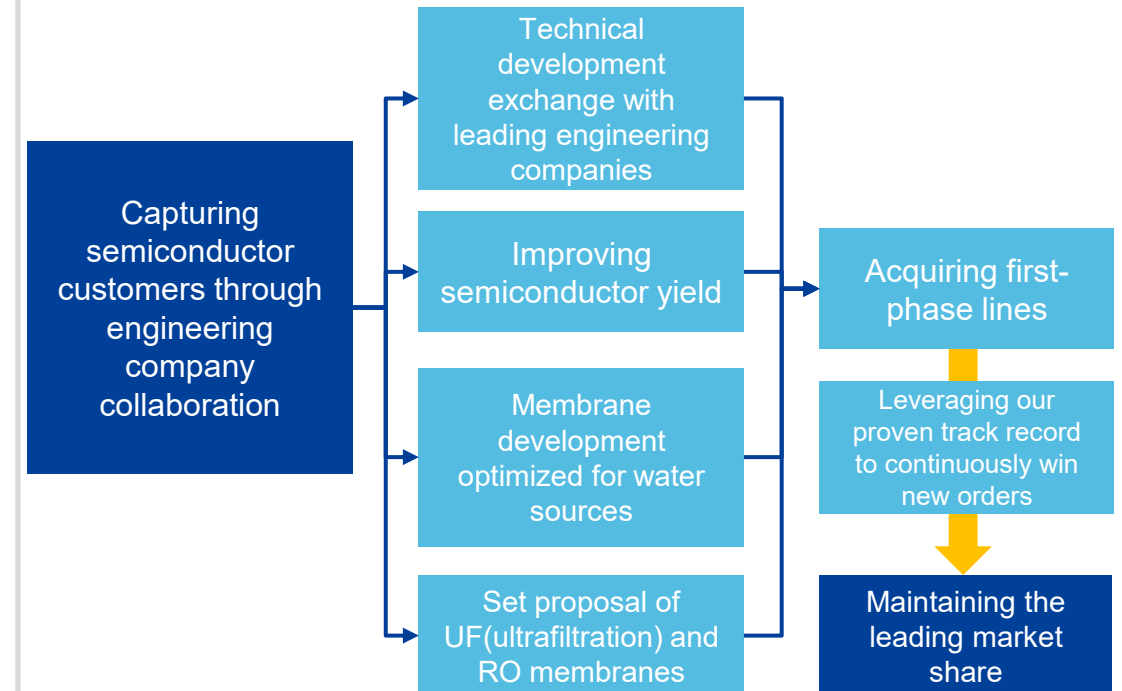
Resin business for Chinese automobiles

Continuously creating high value-added items through advanced development and organizational capabilities centered on local personnel



Ultrapure water production for semiconductors

Expanding market share through membrane development optimized for water sources and collaboration with leading engineering companies



Strategic pricing has moved into Phase 2 to deliver additional results

**Phase 1 (FY 2023-25)
Results and Challenges**
Actual results:
35 billion yen



**Phase 2 (FY 2026-28)
Initiatives**
Target: 27 billion yen

<Results>

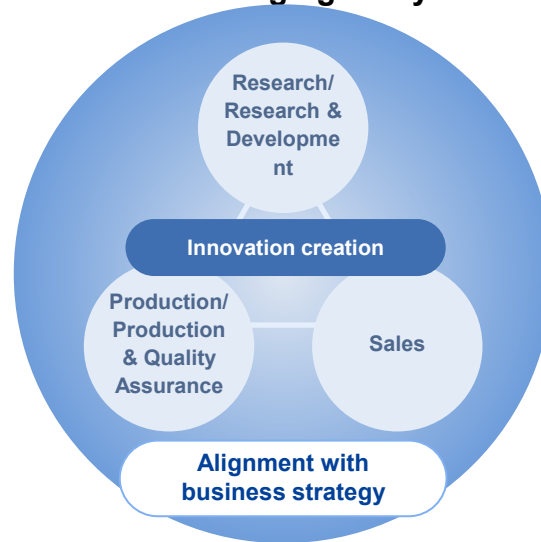
- Achieved cumulative results of about 35 billion yen over three years, due mainly to pricing correction
- Progress was made in transforming on-site mindset and establishing a DX foundation

<Challenges>

- Price correction is diminishing
- Creation of "New Products and New Value" fell short of targets
- Room to improve the monetization of customer value (Customer value verification is required)

Innovation creation + winning formula strategy

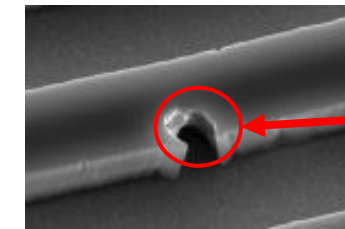
Creating new products and new value through product development and customer value enhancement leveraging Toray's strengths



Strengthening monetization of customer value

Reflecting contribution to enhancing customer value of our products in pricing, maximizing profitability

[Example of semiconductor process film initiatives]



Circuit defects caused by film foreign particles

1. Minimizing film foreign particles and scratches
2. Analyzing the effect on improving customer yield
3. Promoting customer value and revising prices

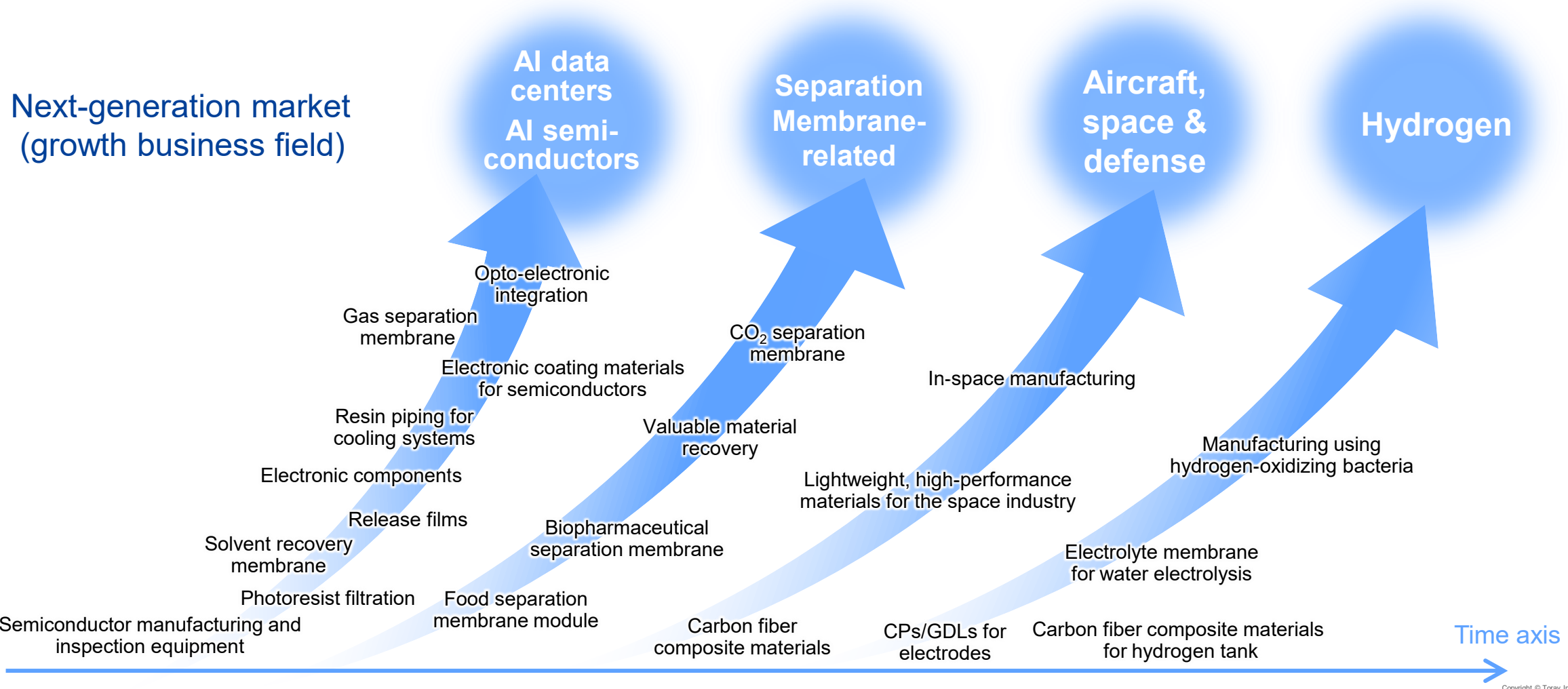
IV

Initiatives for Next-Generation Markets

Initiatives for Next-Generation Markets

To enter next-generation markets with strong growth potential, we will expand our product portfolio while continuing strategic capital and R&D investment for the future.

Specifically, for AI data centers and AI semiconductors, we will also strengthen development in anticipation of next-generation technologies, including opto-electronic integration.

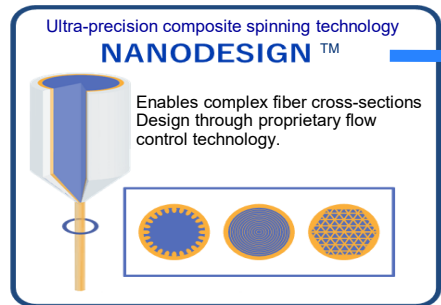


Example of initiatives for next-generation markets:

(1) Data centers, AI and Semiconductors

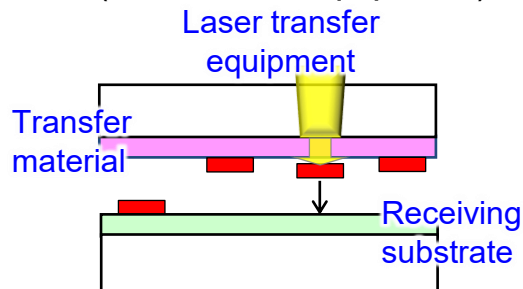
Proprietary technology

Innovative composite spinning technology



- Fibers & Textiles
- Electronic & information materials
- Medical products

High-speed laser transfer technology (materials + equipment)

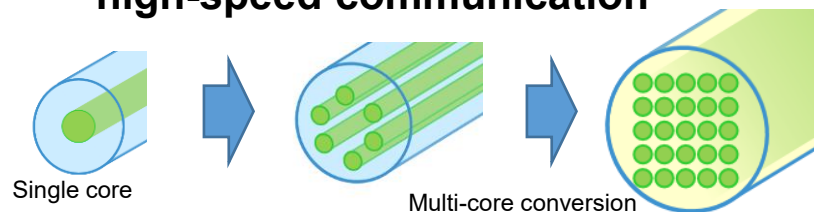


Significant throughput improvement compared to conventional methods through equipment and material coordination

Application expansion

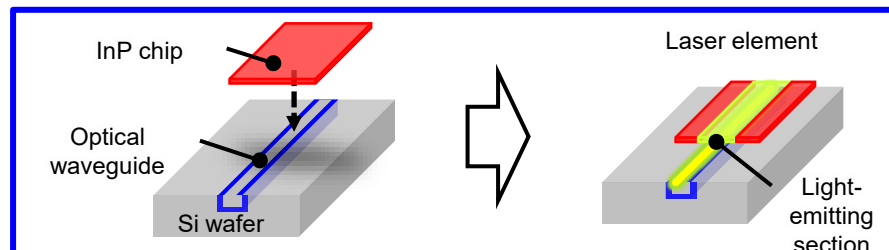
Initiatives for data centers and optical-electrical integration

Horizontal deployment of NANODESIGN™ technology to high-speed communication



Multi-core plastic optical fiber (under development)

Proposing solutions for materials, processes, and equipment for optical-electrical integration



Realizing high-capacity communication for data centers through optical-electrical integration

Integrating our proprietary material and polymer processing technologies with innovative processes and equipment, and expanding into data center applications,

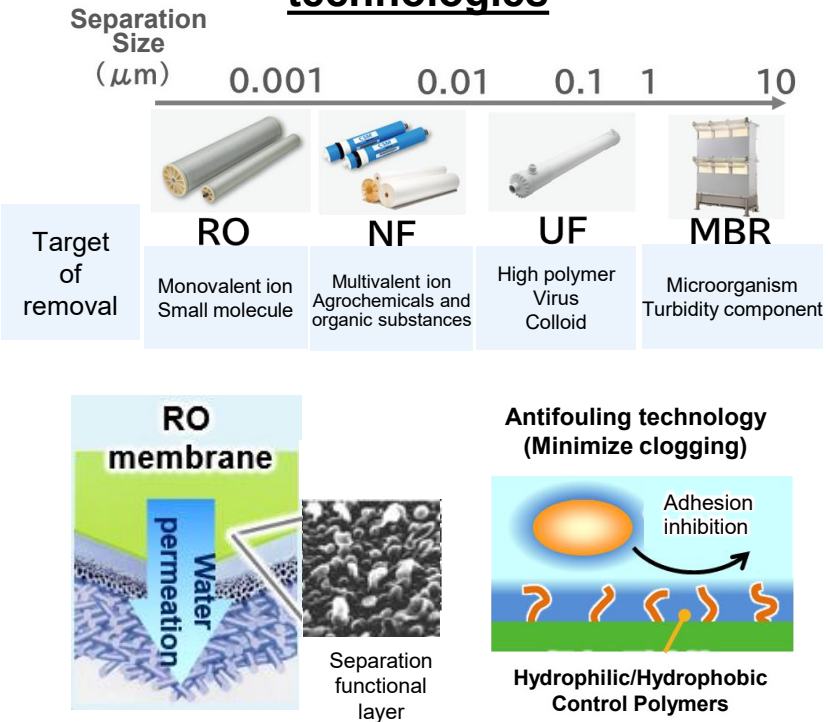
Integrating our proprietary material design and polymer processing technologies with innovative processes and equipment, deploying to data center applications, and contributing to advancement of high-capacity communication and high-performance devices through integrated solutions for materials, processes, and equipment

Example of initiatives for next-generation markets:

(2) Separation membrane related

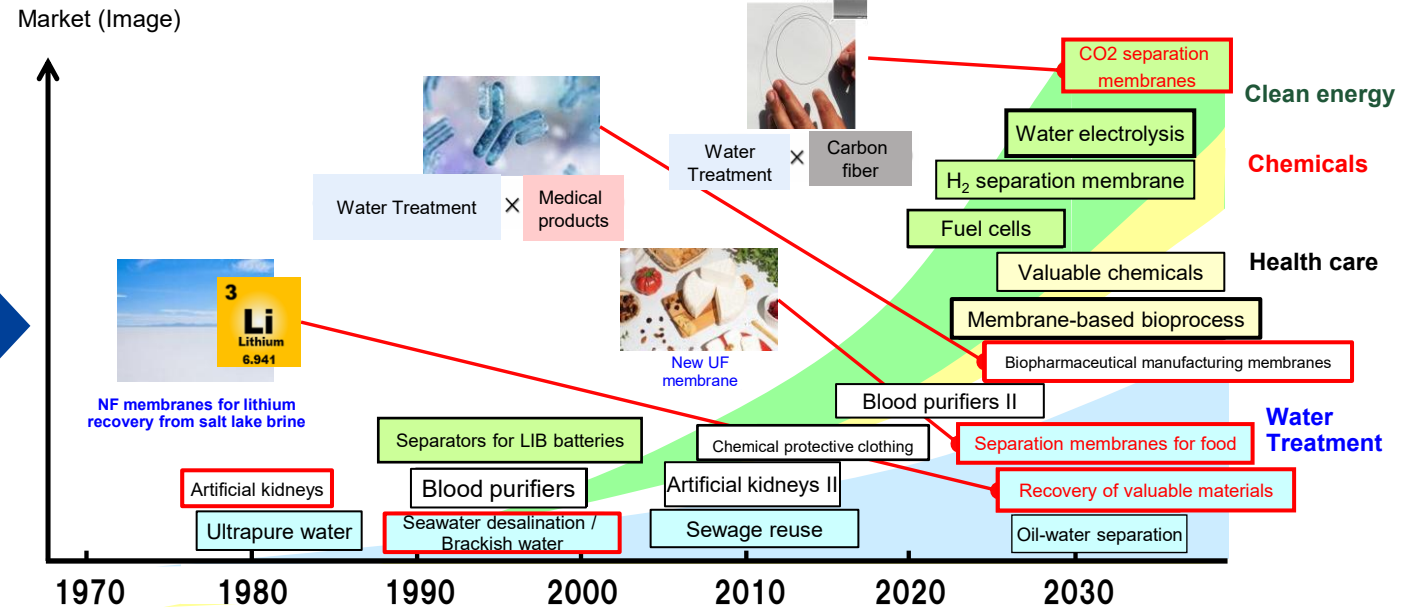
Proprietary technology

Toray's separation membrane technologies



Application expansion

Deepening and deployment of separation membrane technology



Deploying our proprietary membrane separation technology as solutions, contributing to problem-solving through upfront design and advanced marketing

Expand our proprietary membrane separation technology into a wide range of applications and provide integrated solutions incorporating engineering.

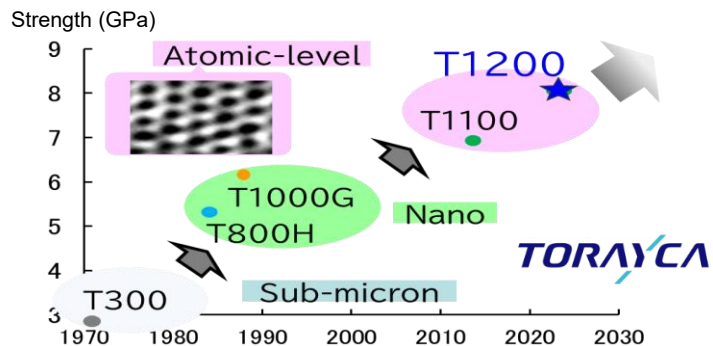
This contributes to addressing social challenges including environmental and healthcare fields (such as valuable material recovery, membranes for biopharmaceutical manufacturing, etc.).

Example of initiatives for next-generation markets:

(3) Aircraft, Space & Defense

Proprietary technology

Advancement of carbon fiber



Intermediate materials and molding technology

TORAYCA™ Prepreg ET40

Good formability

Introduction of slits → Conventional ET40

High heat resistance prepreg

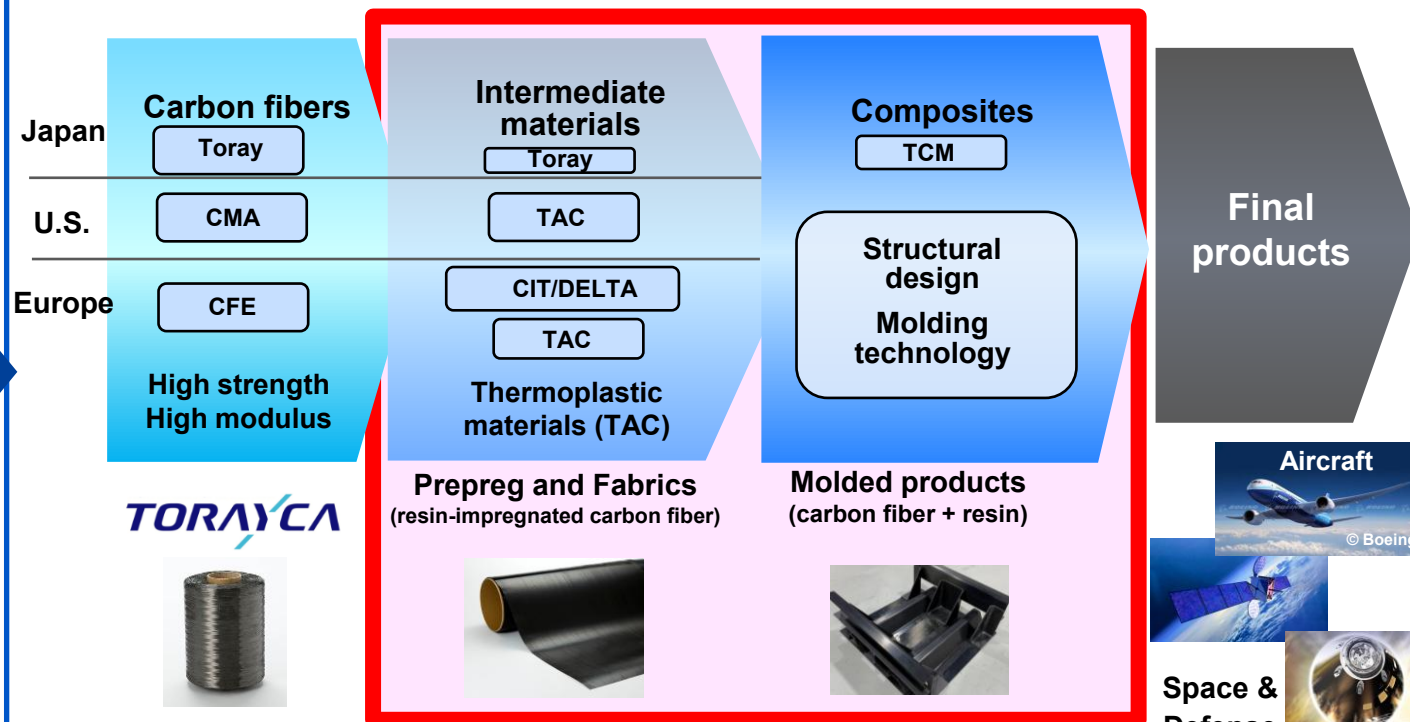
CFRF

Ultra-light-weight and rigid

Randomly distribution of carbon fibers → 3D network structure

Application expansion

Extension of carbon fiber composite materials supply chain



Leveraging technologies and data cultivated in commercial aircraft to expand downstream

Continuously advancing carbon fiber and extending the supply chain to the midstream and downstream by incorporating processing and manufacturing technologies.

Leveraging our global bases in the U.S., Europe, and Asia to steadily capture growing applications in each region.



V

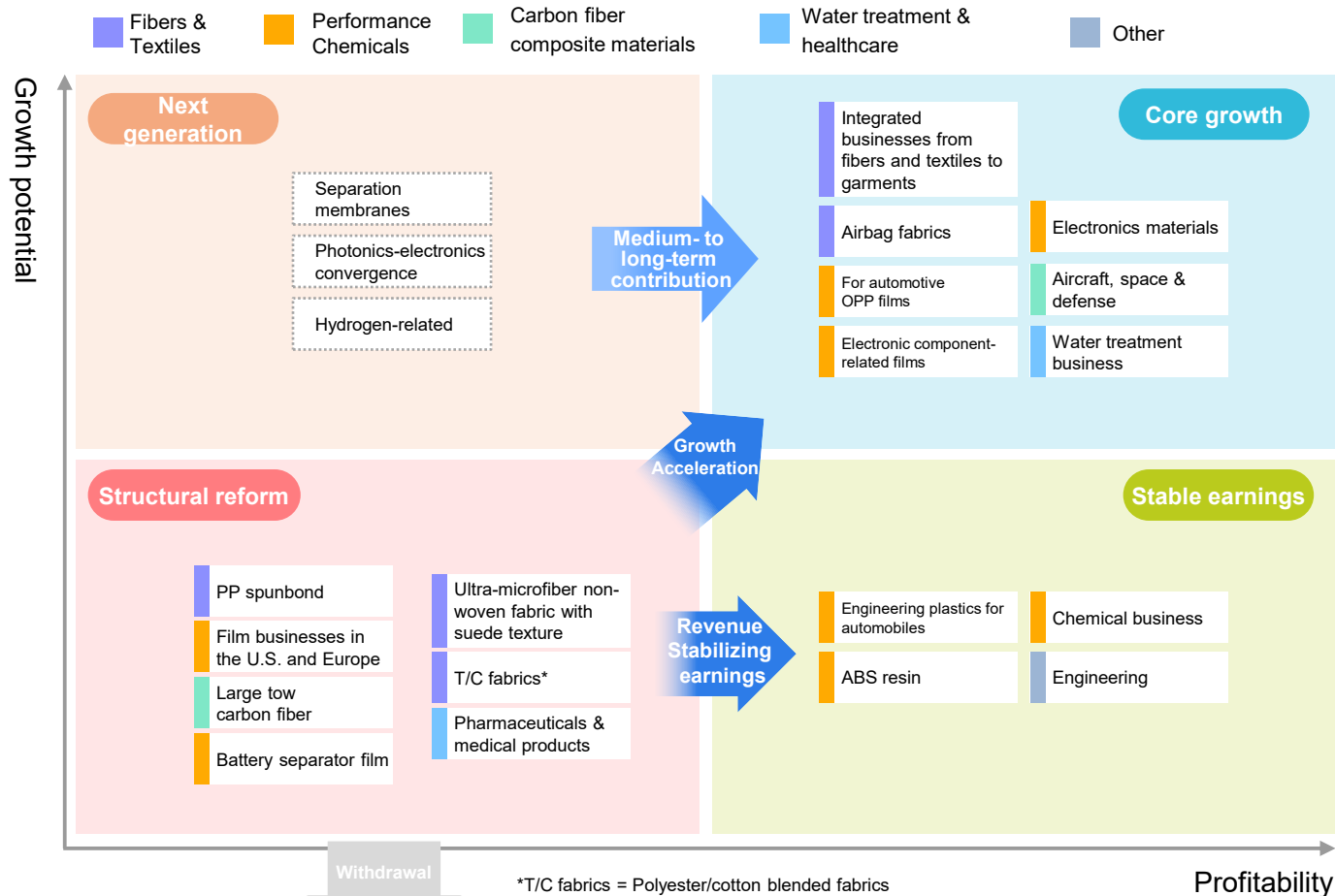
Summary and Targets

<Strategic Overview>

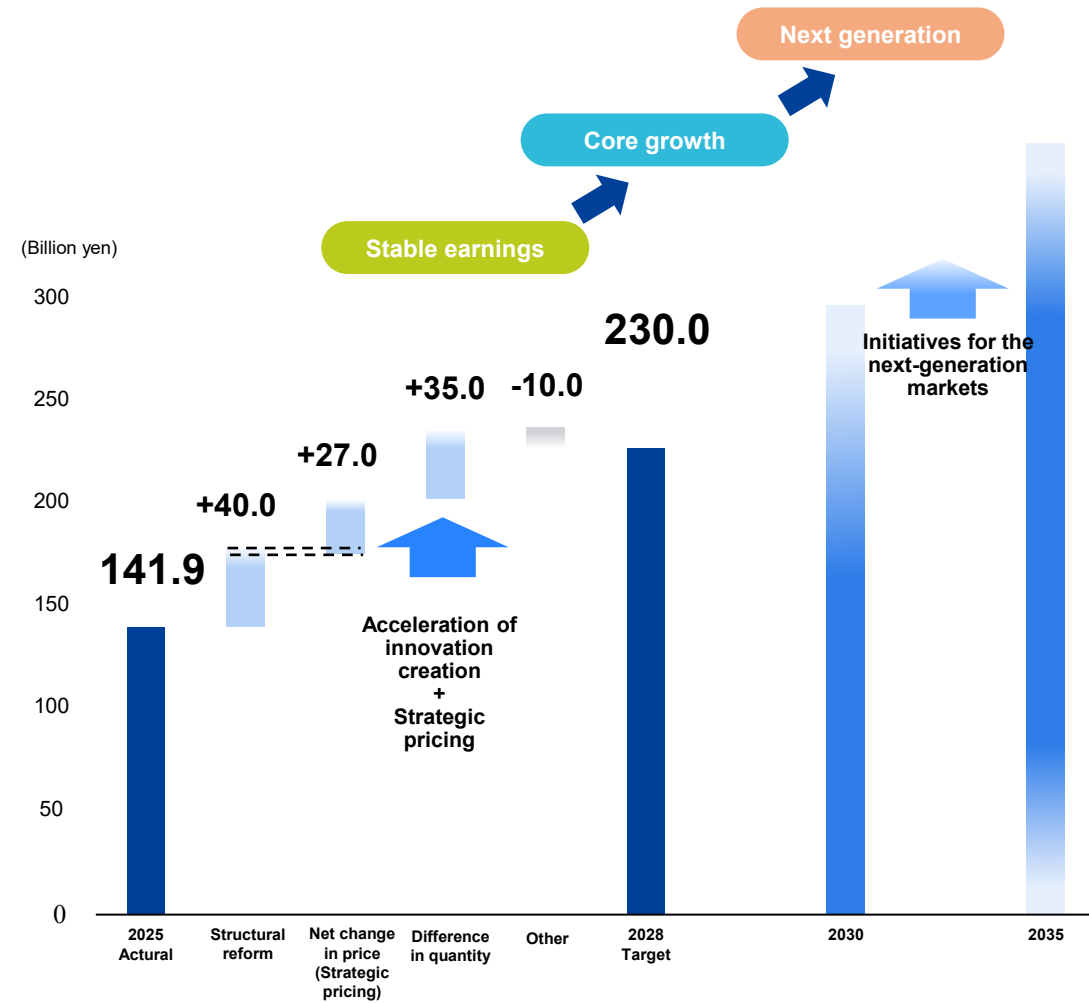
- ✓ **A business environment where the rise of Chinese competitors and accelerating commoditization make it increasingly difficult to sustain a competitive advantage**
- ✓ **Product capabilities are our foundation. To build barriers to entry, we share challenges across sales and marketing, production, and R&D, and accelerate technology development.**
- ✓ **In addition to differentiation through product capabilities, we will build barriers to entry on the business front and develop and execute consistent business strategies that leverage our connected strengths**
- ✓ **Improve profitability through strategic pricing that reflects the full value**

Under IGNITION 2028, we will expand new products and new value through accelerated innovation creation and winning formula strategies, contributing to the achievement of the company-wide core operating income target of 230 billion yen. Strategic pricing is expected to contribute approximately 20 billion yen in core operating income, out of a total impact of 27 billion yen.

Business Portfolio (As of the end of March 2026)



Future Business Expansion Outlook



Descriptions of predicted business results, projections, and business contained in this material are based on predictive forecasts of the future business environment made at the present time.

The material in this presentation is not a guarantee of the Company's future business performance.

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