TORAY
Innovation by Chemistry

100TH

TORAY IR Day

Medium-Term Management Program “IGNITION 2028”

Engineering Business

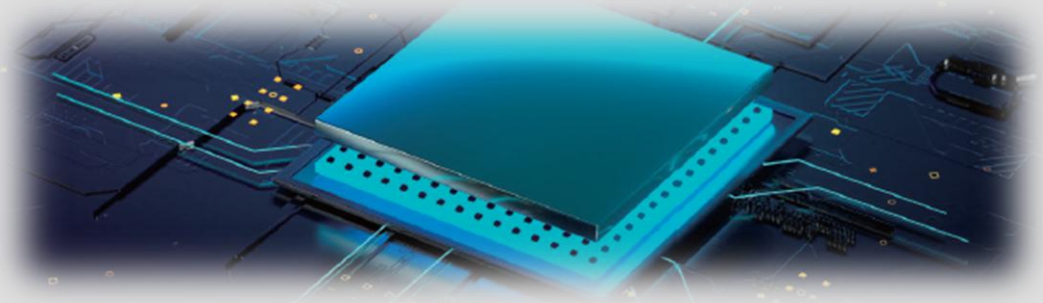
June 8, 2026

Corporate Vice President,
Affiliated Companies Division

Kaoru Inoue

Toray Engineering Co., Ltd.
CEO&COO

Takashi Iwade



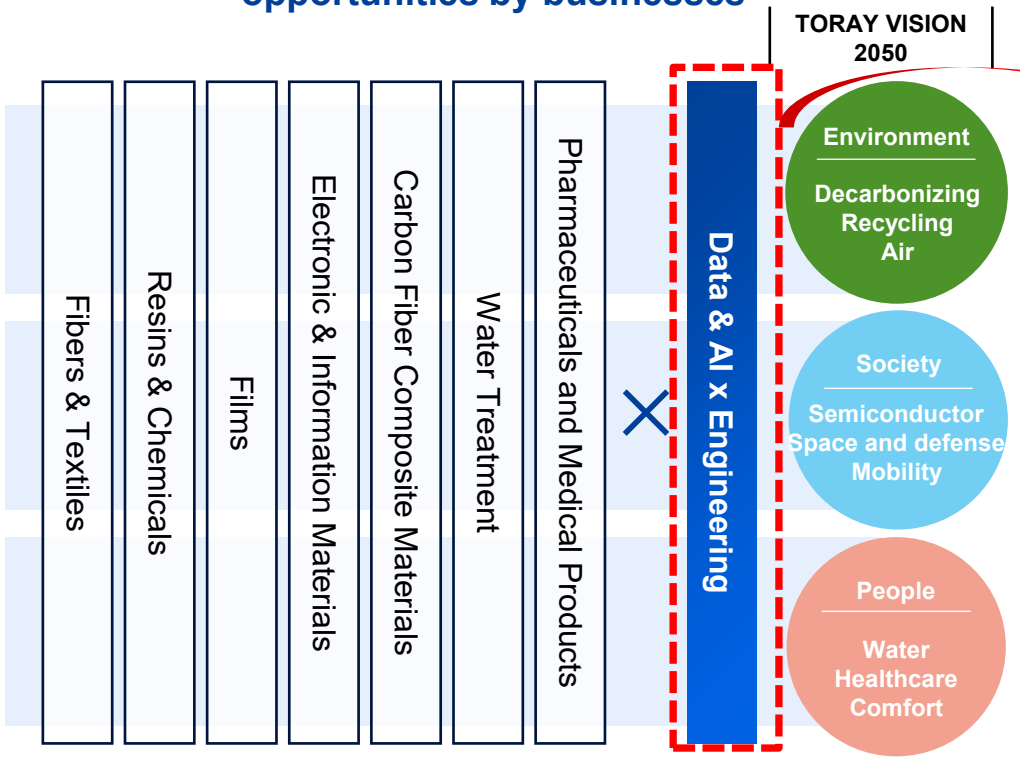
INDEX

Toray Group's Engineering Business

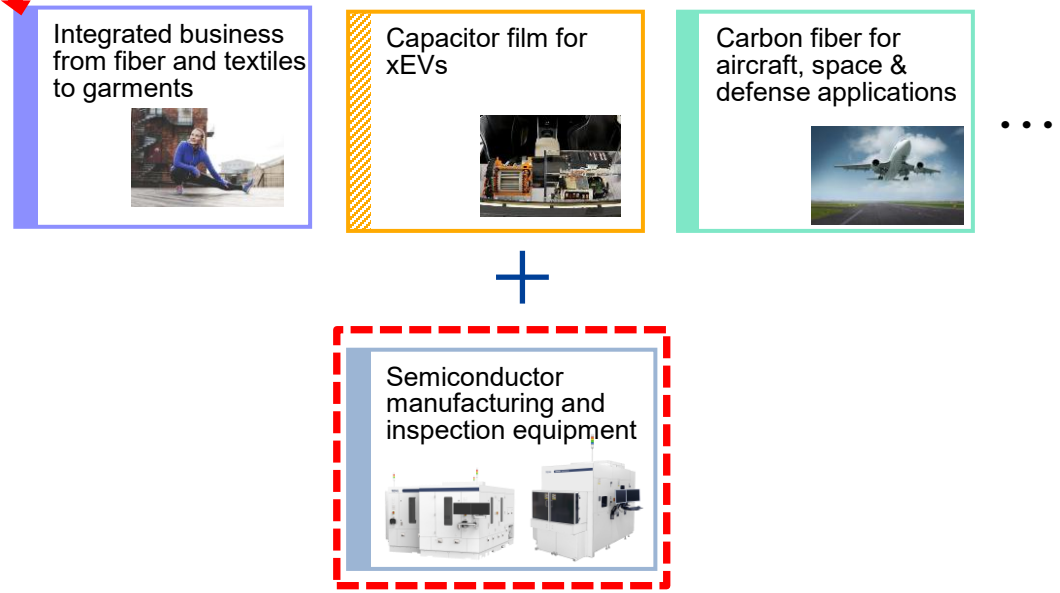
Positioning of the Engineering Business in the Toray Group's Growth Strategy

We aim to create economic and social value by combining the strengths of each business with data and engineering capabilities to address social issues and changes in the business environment related to the environment, society, and people, while turning risks into opportunities.

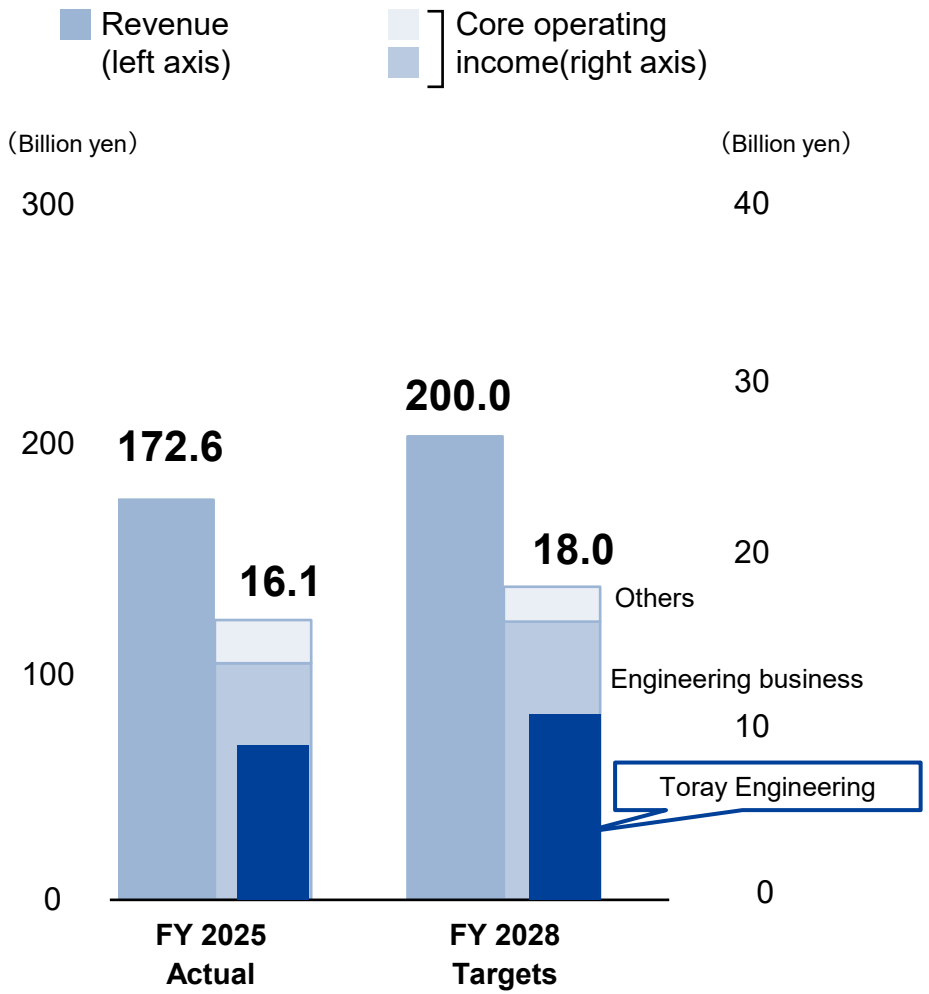
Create economic and social value through solving social issues and capturing opportunities by businesses



We plan to expand business in the semiconductor field and other areas through refined engineering capabilities, in addition to the social implementation of technologies and products developed by the Toray Group (machinery manufacturing and plant construction).



IGNITION 2028 Targets of “Engineering Business and Others”



Engineering Business and Others

- **We have business companies that are indispensable for the social implementation of Toray Group's products and technologies, including engineering and analysis.**
- **Toray Engineering Co., Ltd. (hereinafter referred to as TRENG), which belongs to the Engineering Business, has been in business for 66 years and has accumulated a wide variety of engineering expertise through equipment manufacturing, plant construction, electronic equipment business, and other activities.**
- **In the semiconductor field, which is a medium- to long-term growth market for the Toray Group, we have received high recognition for our technologies stemming from TAB manufacturing equipment, and we plan to steadily grow our performance under IGNITION 2028.**

II-1

Toray Engineering Co., Ltd. (TRENG)
－Overview of TRENG－

1. Toray Engineering Co., Ltd. (TRENG): Company Overview

Established	**1960**
Head Office	**Head Office** 6th Floor, Yaesu Ryumeikan Bldg., 3-22, Yaesu 1-chome, Chuo-ku, Tokyo **Second Headquarters** 1-1, Sonoyama 1-chome, Otsu, Shiga (Inside the Toray Industries, Inc., Shiga Plant)
Paid in Capital	**1.5 billion yen**
Sales (consolidated)	**121.4 billion yen** (FY 2025)

Takashi Iwade

CEO & COO

Number of Employees (consolidated)	**2,072** (as of March 31, 2026)
Domestic Network	■ Seta Plant (Shiga) ■ FA Innovation Center (Shizuoka) ■ Yokohama Technical Center ■ Tokyo Office ■ Osaka Office ■ Nagoya Office

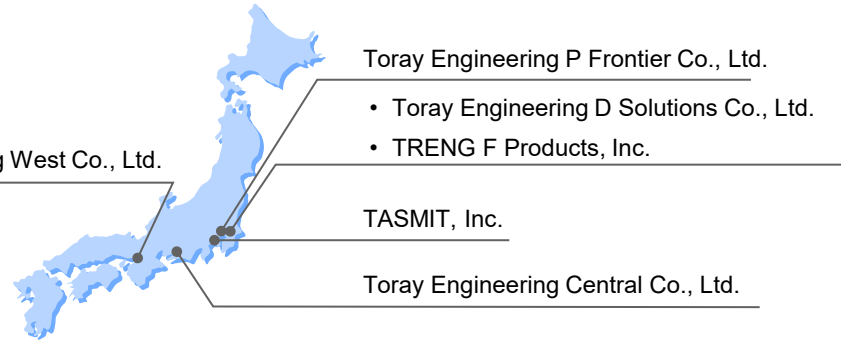
2. Organization and Group Companies

Organizational Chart

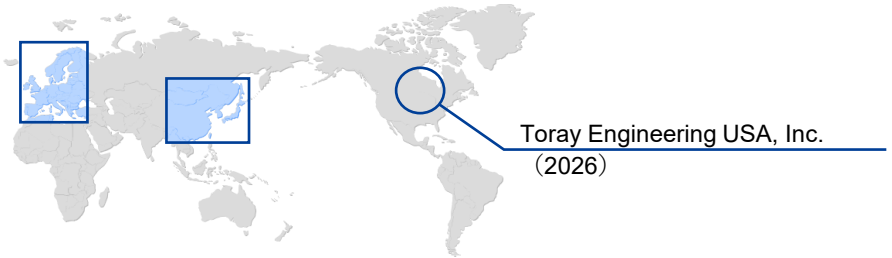
- Board of Directors
  - CEO & COO
    - Management Committee
  - Auditor Dept.
  - Corporate Strategic Planning Dept.
  - Growing Together Promotion Dept.
  - Research & Development Div.
  - CSR Div.
  - General Affairs & Human Resources Div.
  - Finance & Controller's Div.
  - Information System Div.
  - Global Business Promotion Div.
  - Procurement Div.
  - Quality Assurance & Security Trade Management Dept.
  - Engineering Business Div.
  - Mechatronics & Fine Technology Business Div.

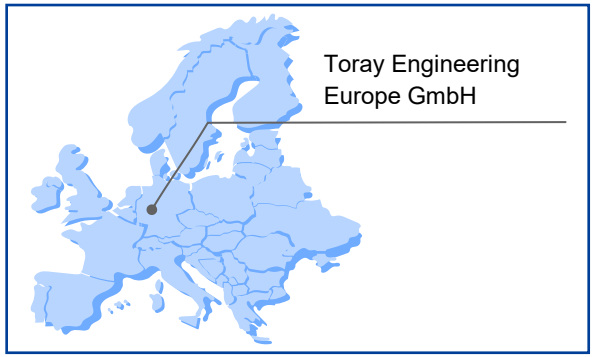
Main Subsidiaries

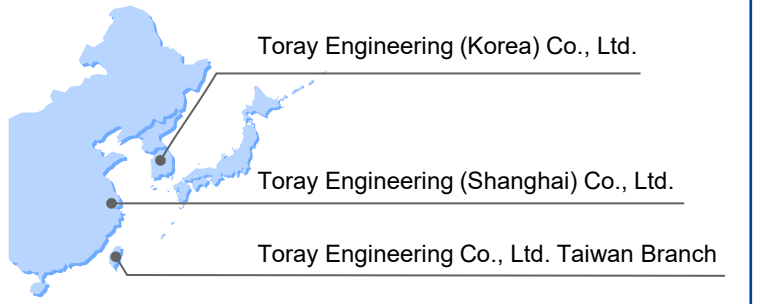
In Japan



Outside Japan

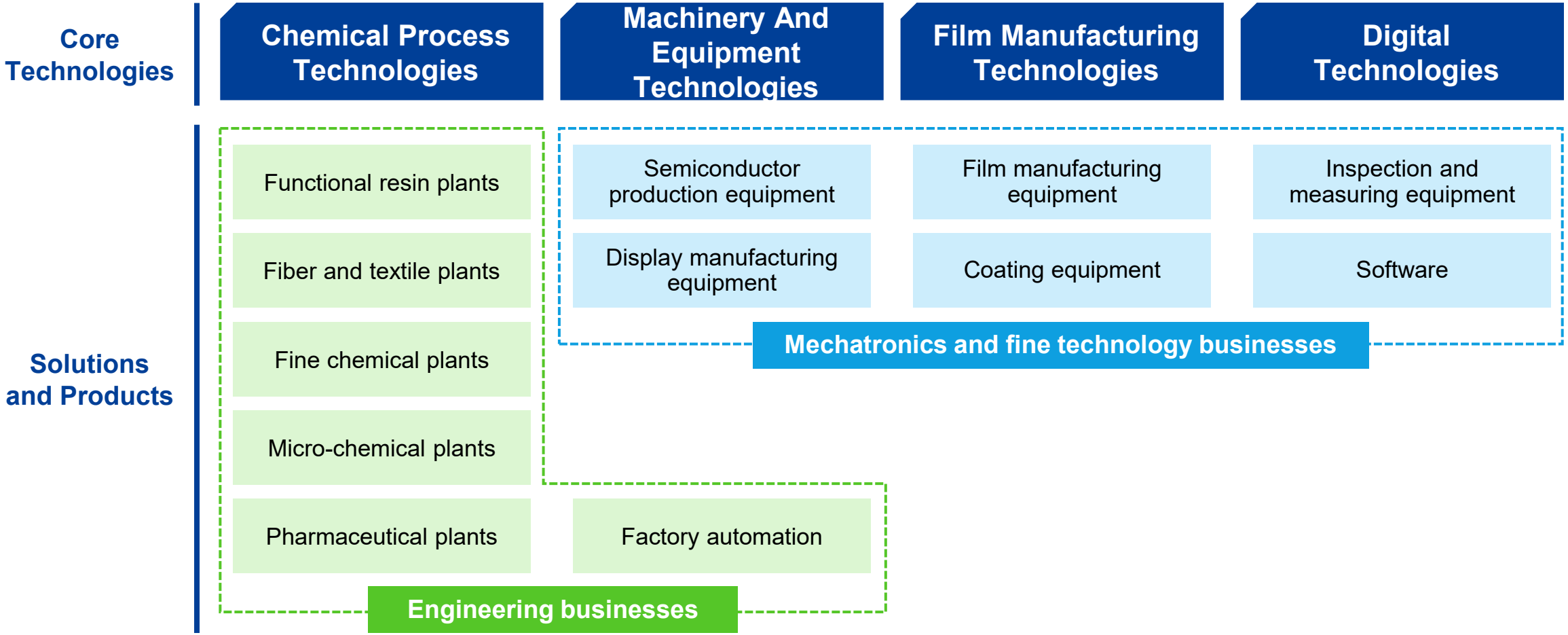






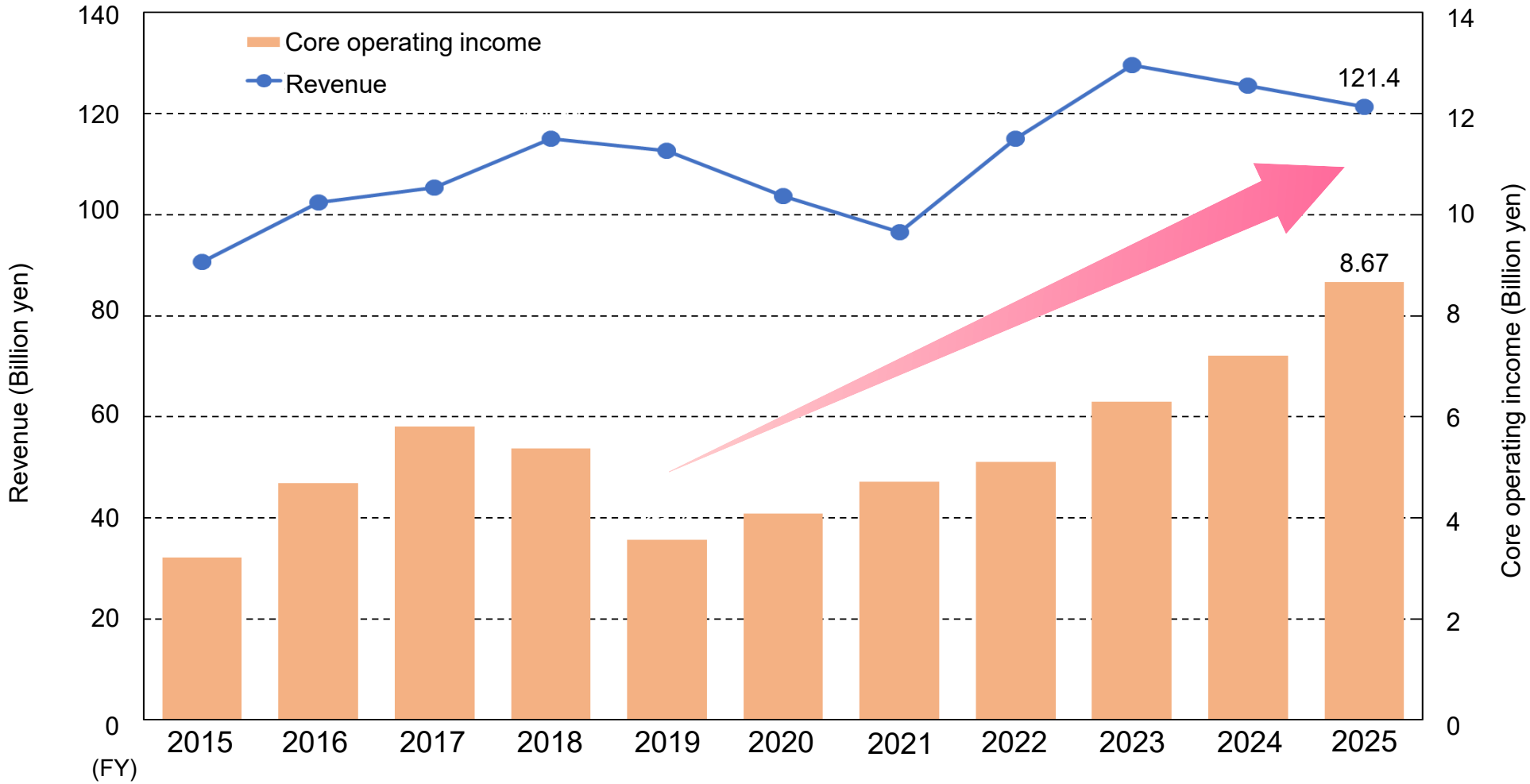
3. Our Technologies and Business / Product Portfolio

From our four core technologies, we are creating a diverse range of technologies and solutions, and developing a broad array of businesses from plant engineering to manufacturing equipment and systems.



4. Trend of Business Performance

Through the promotion of profit improvement and business expansion in growth areas such as semiconductors, we have achieved increase in core operating income for six consecutive years since FY 2019.

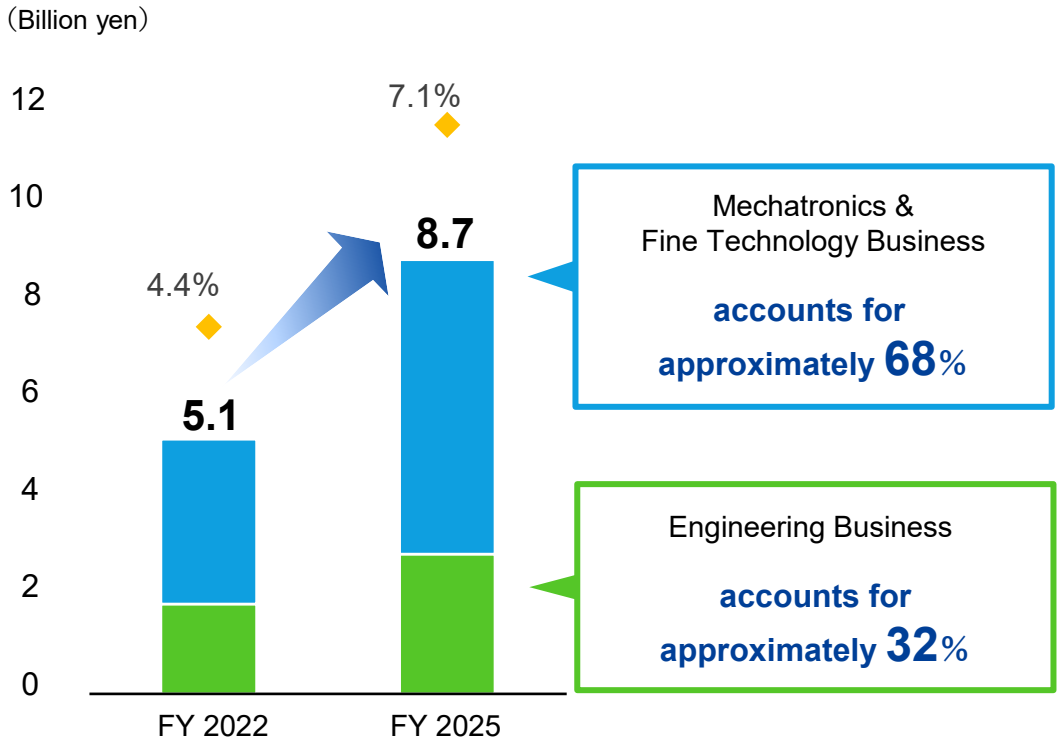


5. Reviewing AP-G 2025

Despite a challenging business environment, we worked on improving profit margins through productivity enhancement, resulting in a significant increase in core operating income

Mechatronics and fine technology businesses, which have growth areas, grew steadily

Core operating income and core operating margin



【Challenges and Results】

■ Commitment to growth areas
- Pharmaceutical manufacturing plants (Engineering Business)
- Secondary batteries (LIB) (mechatronics and fine technology business)
- Semiconductor-related (inspection equipment and mounting equipment) (mechatronics and fine technology business)

→ Although the challenging business environment continued due to the impact of Trump's tariff policies, orders increased

■ Strengthening the management base
- Improved core operating margins through productivity enhancement
  → Core operating margin improved by approximately 3%
- Technology enhancement, human resource strategy, brand strategy
  → Digital transformation (DX), education, human resource investment, establishment of “TRENG” business brand

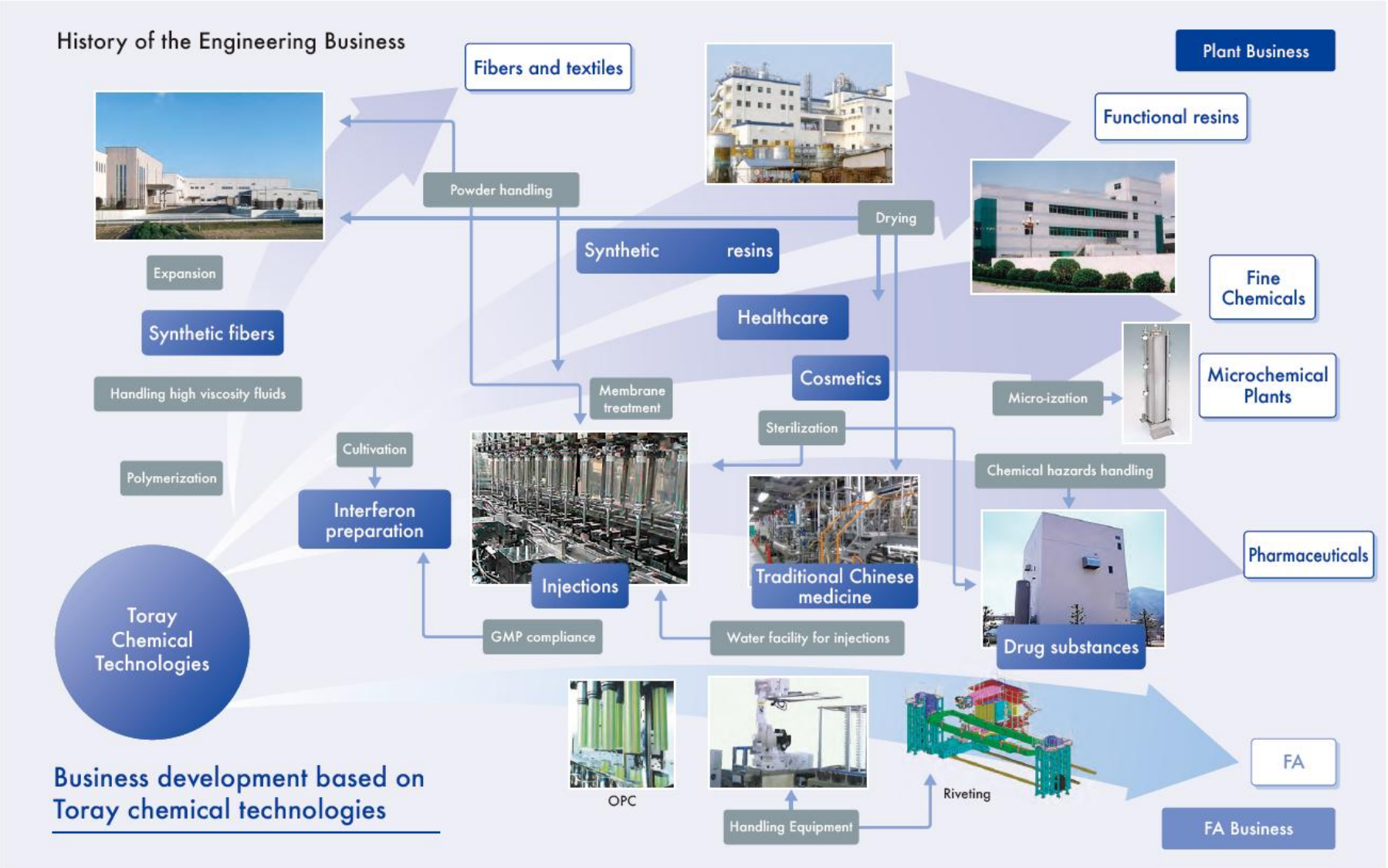
【Challenges for the Medium-Term Management Program from FY 2026 onward】

■ Strengthening the corporate structure for medium- to long-term expansion (growth strategy and structural reform)

II-2

Business Overview of TRENG and Growth Strategy
－Engineering Business, Mechatronics & Fine Technology Business－

1-1. Engineering Business



1-2. Overview and Strengths of Engineering Business

- Providing plants and equipment that support the manufacturing of advanced materials

Plant Engineering

- Providing a comprehensive service, from design to construction, for chemical plants
- In pharmaceutical plants, we execute proposal-based engineering based on the technical capabilities accumulated primarily in fermentation/cultivation plants and pharmaceutical intermediate/synthetic API manufacturing plants
  *ISPE Japan participating company
  International Society for Pharmaceutical Engineering

Engineering → **Procurement** → **Construction**

Example: Pharmaceutical plants

Applying encapsulation technologies for high potency, high activity pharmaceutical ingredients

▼

Realizing plants with **safety and workability**

Pilot plant for high-potency pharmaceutical development

High-capacity plant for high-potency pharmaceuticals

Factory Automation

Designing and manufacturing automated manufacturing systems that leverage robots

Example: EV and HEV manufacturing equipment

Providing optimal solutions for vehicle motor manufacturing processes, including automated coating and inspection

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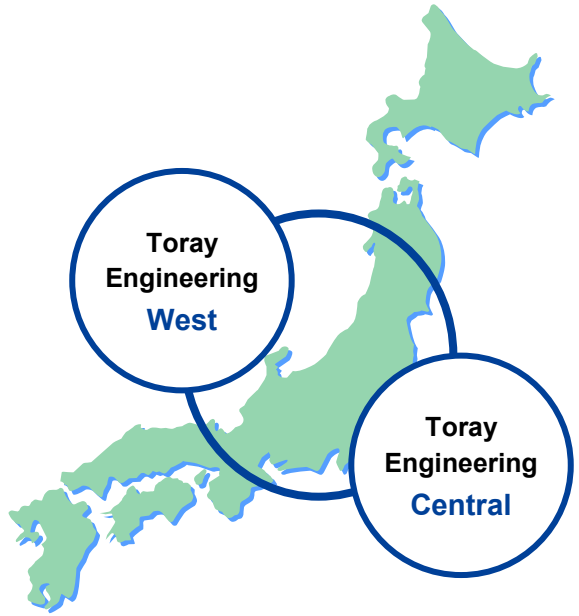
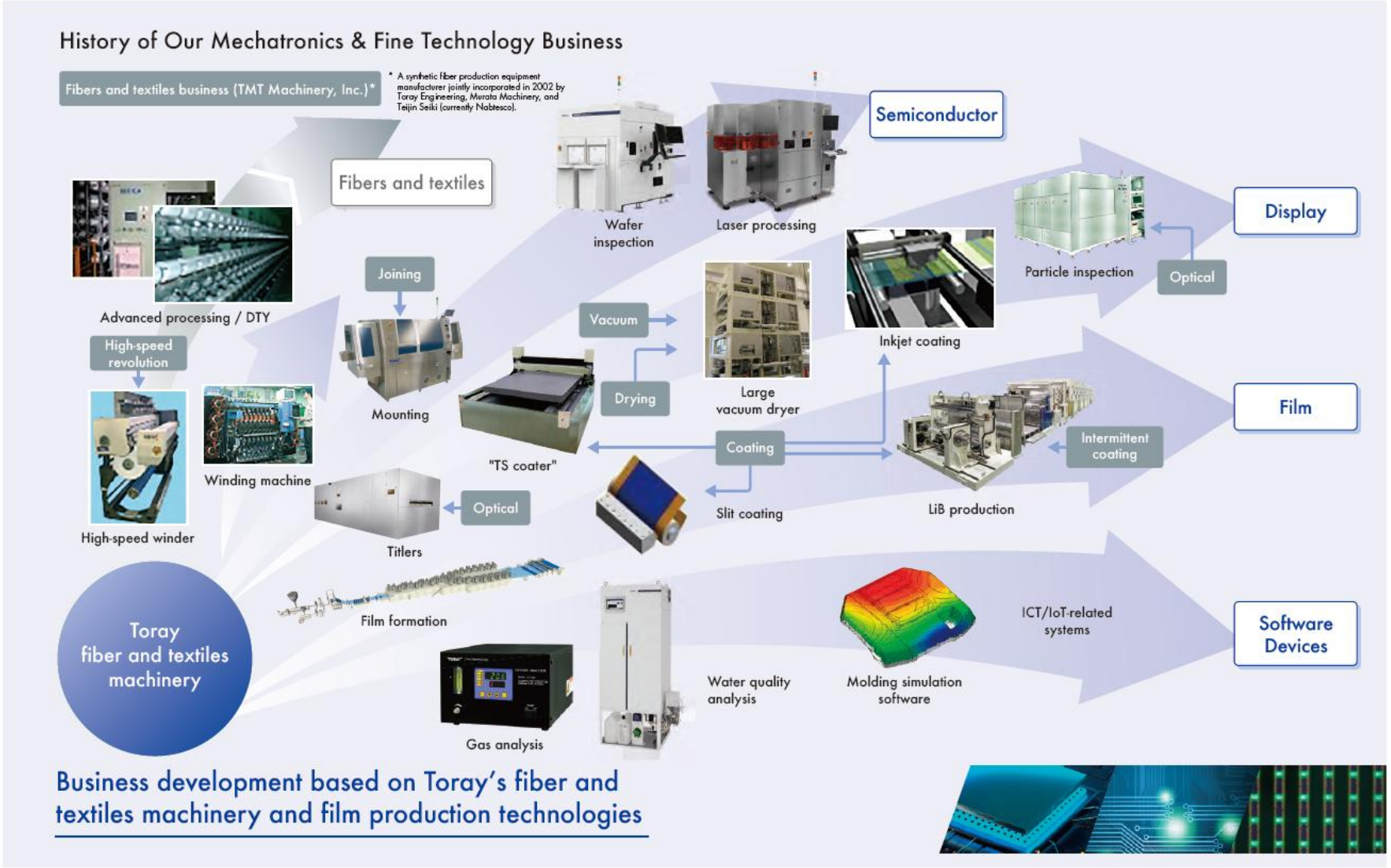
Contributing to **reducing material loss and high efficiency**

Maintenance

Providing fast and detailed equipment maintenance services through Group companies



2-1. Mechatronics & Fine Technology Business



2-2. Overview and Strengths of Mechatronics & Fine Technology Business

- Combining mechatronics and microfabrication technology to provide cutting-edge solutions

Display and Semiconductor Manufacturing Equipment

Provide cutting-edge equipment and solutions for display and semiconductor fields

Electron beam wafer inspection and measurement equipment (NGR™)

- Contributing to advanced semiconductor development through wide, low-distortion field of view and Die to Database technology.
- Working toward expanding adoption from development to mass production factories for advanced semiconductors.

Example:
PLP-related equipment “PLP Coater / Bonder"

- Equipment for Panel Level Packaging (PLP)
- PLP is a 3D semiconductor packaging technology expected to be adopted in high-end applications such as data servers.

PLP Coater

PLP Bonder

Film Manufacturing Equipment

Based on "coating, laminating, and cutting" converting technologies, deploying secondary processing equipment and film manufacturing equipment cultivated in film production

Example:
Electrode manufacturing equipment for lithium-ion batteries

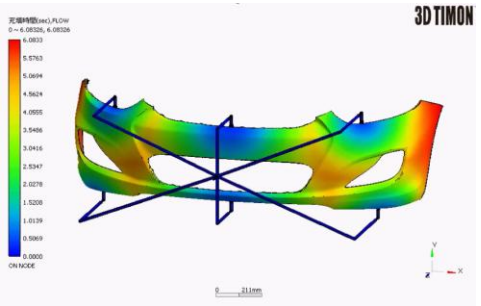
- Recognized for advanced coating and manufacturing technologies
- Our coater and slitter equipment has been adopted by various battery manufacturers

Software / Inspection / Measurement equipment

Providing factory management, production management, and CAE* solutions as “Factory AI”

Also providing measurement, analysis, and process equipment for process monitoring and improvement

*CAE: Computer Aided Engineering



2-3 Reference Materials: PLP (Panel Level Package) Related Equipment

Technology Trends in High-End Semiconductor Packaging

1) Chiplet

Integrating multiple semiconductor chips into a single package to achieve higher performance

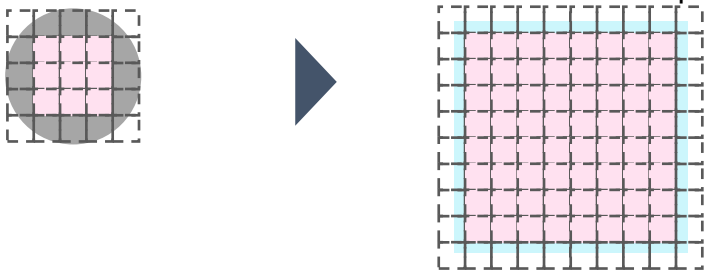
Single-chip configuration　　Multi-chip configuration

2) From wafer to panel

Shift to large panels to improve production efficiency as package sizes increase

PLP（Panel Level Package）

Φ300mm wafer　　515mm x 510mm panel



3) Adoption of glass materials

Glass materials that offer low thermal distortion, enabling finer wiring and high-speed communication

The importance of PLP for large-area, high-accuracy bonding is increasing

PLP as a Core Technology for Next-Generation Packaging, Driving Focused R&D and Investment

High-precision coating equipment for glass PLP: TRENG-PLP Coater

Supporting next-generation PLP through highly uniform coating and glass substrate transport technologies

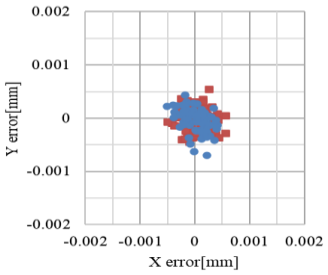
- Equipment for uniform coating of insulation and RDL materials with high thickness consistency, enabling high-density wiring on glass
- Extending our high-accuracy coating technology, with leading market share in the LCD panel industry, to the semiconductor field

Thermocompression flip-chip bonder for PLP: UC5000

Establishing an advantage in PLP through large panel capability and high-accuracy bonding

- Equipment for high-accuracy bonding of semiconductor chips
- Achieving industry-leading bonding accuracy of 0.8 μm or less (3σ)

Mounting precision



2-4. ROIC-driven Business Development and Collaboration with Toray Material Technologies

In business fields with significant changes, we will balance investments in each position while monitoring the recovery situation.

PLP Coater **PI Materials**

LIB Coater **Vapor Deposition Film**

【Next Generation Business】 R&D

- Next-generation products
- Increased investment = ROIC deterioration
- Having many items in this quadrants leads to future growth

【Core growth business】 Product launch

- Maintain or expand share
- While maintaining ROIC levels, continue business with small development investments

【Outside business scope】

- Even if share expansion is possible, do not actively allocate resources

【Stable profit business】

- Secure high share even in non-growing environments to exclude entry of new competitors
- Investment is almost unnecessary
- ROIC is at a high level

Optimization

Large Growth potential

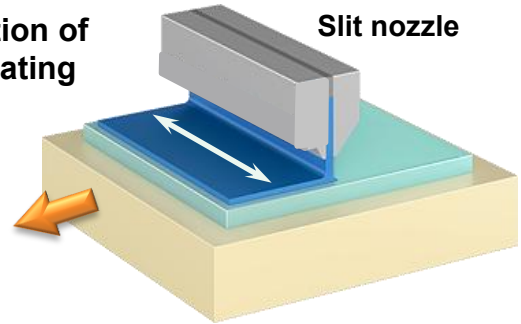
Large share

Applying coating process technology cultivated at Toray Group while collaborating on materials x equipment know-how to various applications for business development

TRENG equipment technologies **Toray material technologies**

Illustration of slit coating

Slit nozzle



TS Coater **BM / OC materials**

Leading global share

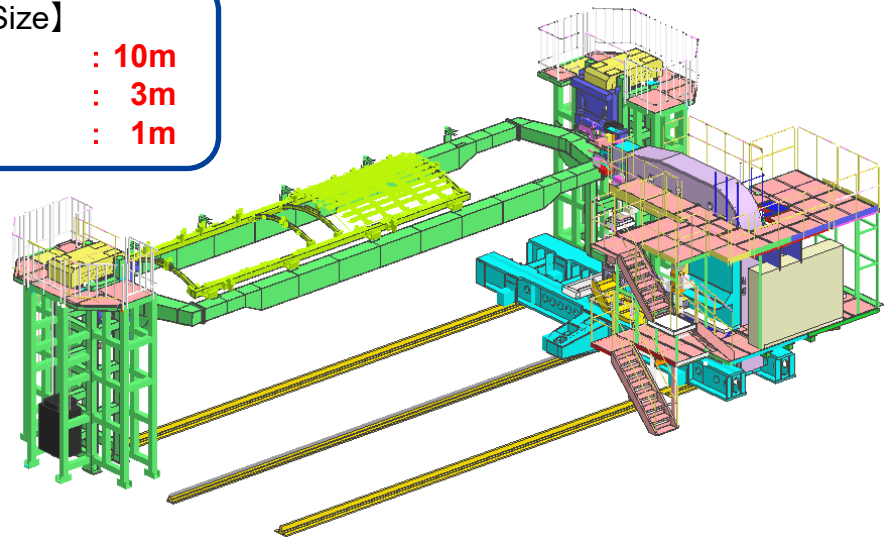
II-3

Initiatives for Next Generation and Sustainability at TRENG

1. Initiatives for Next-Generation
(Aircraft Manufacturing Equipment, Collaboration with Startup Companies)

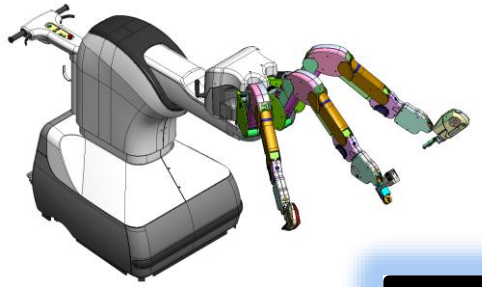
・Strengthening our aircraft manufacturing equipment business through expansion into riveting equipment

【Work Size】
Width : 10m
Depth : 3m
Height : 1m



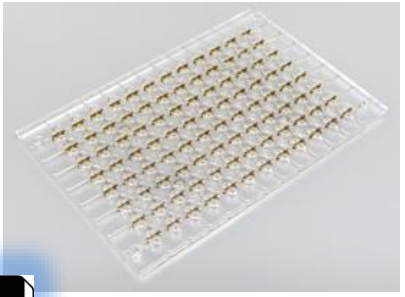
・Collaboration with startup companies

RIVERFIELD



Surgical support robot

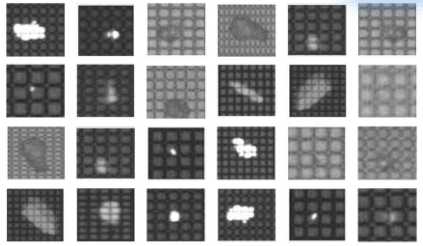
MAQsys



Artificial cell membrane chip

TRENG
Solution by Technology, Engineering & Know-how

LPIXEL

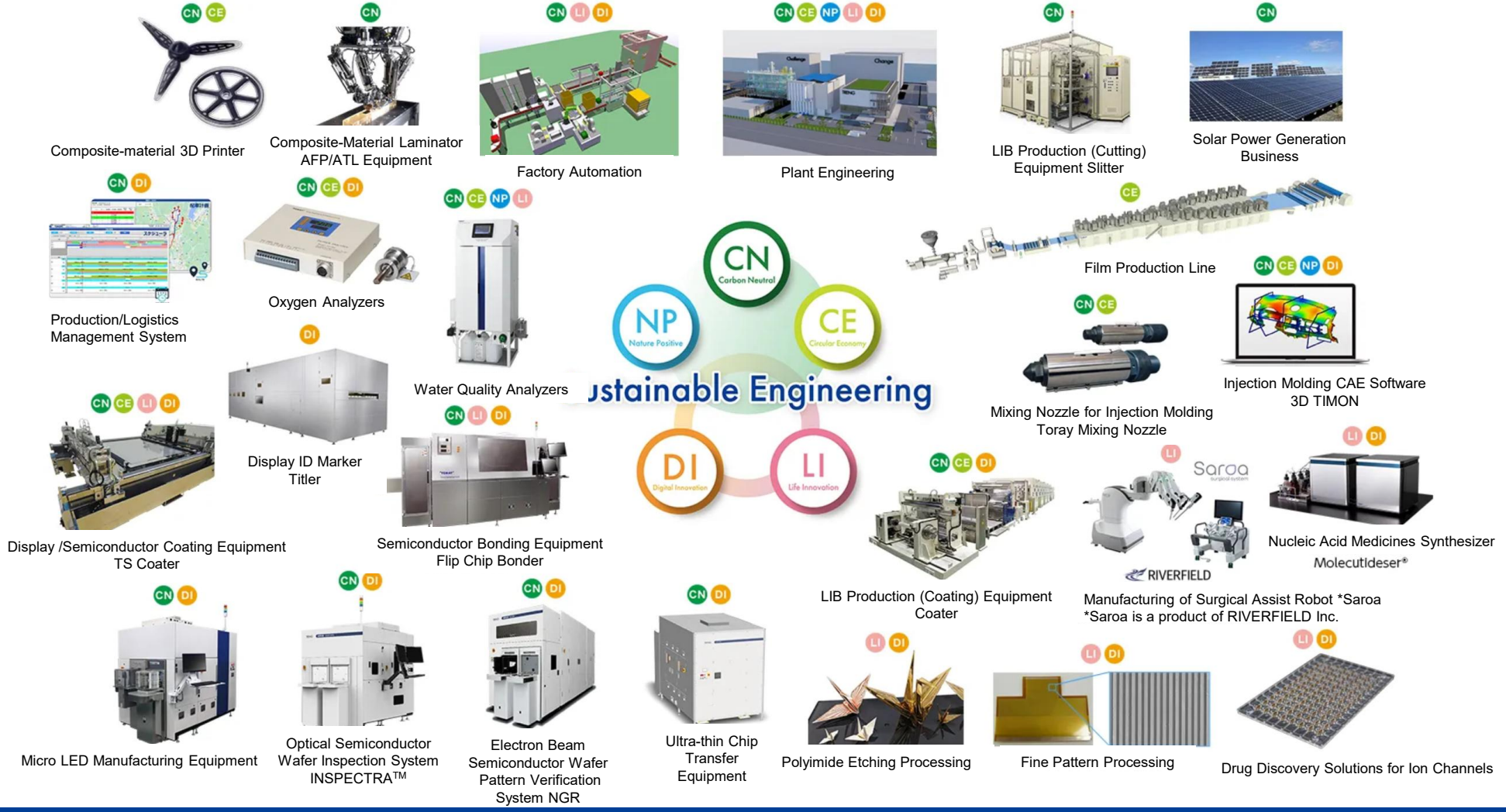


AI technology development

Strengthening the fusion and collaboration between Toray Engineering's technology and startup companies' technology, while creating future businesses

2. Initiatives for "Sustainable Engineering"

- Promoting "Sustainable Engineering" focused on the environment, society, and people across various products.



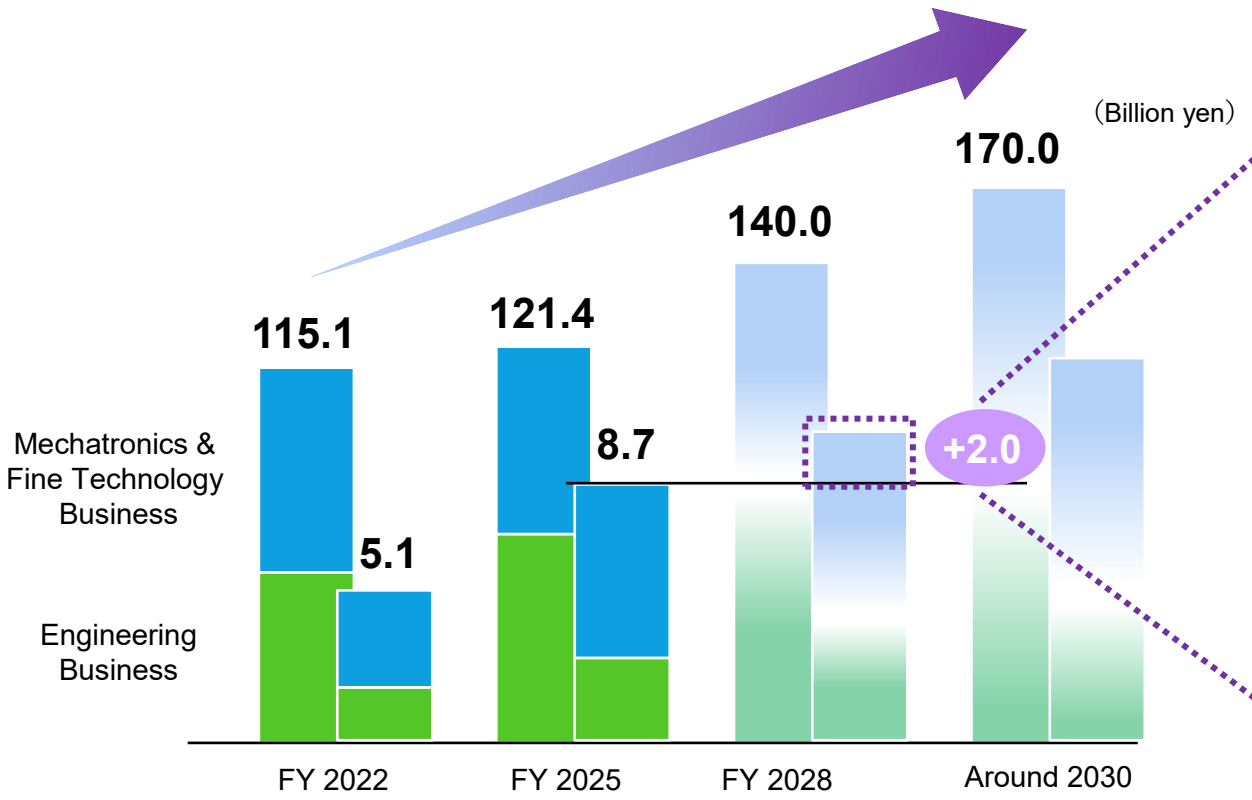
III-4

Targets of TRENG

Targets of TRENG under IGNITION 2028, and Outlook

Business Performance Trends of TRENG

Revenue, Core operating income



- In AP-G 2025, we delivered growth in revenue and core operating income compared with FY 2022, despite challenging business conditions resulting from customers' revisions to capital investment plans
- Under IGNITION 2028, we aim for sales revenue of 140 billion yen mainly driven by growth in LIB manufacturing equipment for the stationary applications and semiconductor-related equipment. We also aim for business expansion to 170 billion yen around FY 2030 by further expanding aircraft-related equipment

For expansion in revenue and core operating income toward FY 2028, we will focus on expanding the following businesses

【 Focus businesses and expected increase in core operating income (compared to FY 2025) 】

- LIB equipment-related (15%)
- Semiconductor inspection / measurement equipment-related (20%)
- Semiconductor manufacturing equipment-related (25%)
- Pharmaceutical and semiconductor material plant-related (10%)

We aim to achieve continued growth in core operating income, by appropriately assessing trends in focus businesses, flexibly restructuring the portfolio, and working to improve core operating income margins.

TRENG corporate website

https://www.toray-eng.com/

TRENG Official SNS

https://www.youtube.com/@toray-engineering

Descriptions of predicted business results, projections, and business contained in this material are based on assumptions and forecasts regarding the future business environment, made at the time of publication. Information provided in this material does not constitute any guarantee concerning the Toray Group’s future performance.

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