

## New Business Development Division

### Message



### Masahide Yamada

Executive Officer, Head of New Business  
Development Division

Our role is to continuously create and commercialize new businesses and products underpinning Denka in FY2030 and beyond.

To achieve this, we must advance three stages in parallel: proposing new businesses (sowing seeds), incubation (nurturing growth), and commercialization (reaping returns). We will work closely with the relevant business divisions, including the Production Technology Division, and each operating site.

Uncertainty, however, is an inherent part of new business development. We will always maintain the mindset of a contender, testing hypotheses based on objective data and logical inference to overcome uncertainty in new businesses and deliver significant results.

### Research & Development Policy

We aim to improve R&D efficiency and significantly strengthen our product development capabilities. To this end, we will substantially improve R&D processes by leveraging generative AI, data science, MI/BI/PI, and laboratory automation.

#### Strategy in the Management Plan "Mission 2030" (Road Map for Achieving "Mission 2030")

##### [FY2025 Results]

##### Propose ten seeds for new businesses

Provide samples to prospective users in six research themes

##### Enhancement and promotion of R&D according to the megatrend

Discontinue approximately 10% of research themes  
→ Concentrate resources on megatrends

##### [FY2027 Targets]

##### Begin commercializing new businesses (including sales of trial products)

- Roll out certain laboratory automation
- Operate the R&D platform
- Begin using a database to manage research themes and resources

##### [FY2030 Target (desired state)]

##### Operating income of up to ¥3.0 billion

Establish a framework that continuously moves new businesses from proposal through incubation to commercialization

### Promotion System

Research Management

New Business Development Division

Business Division

R&D Management Department

Intellectual Property Department

Analysis Technology Research Department

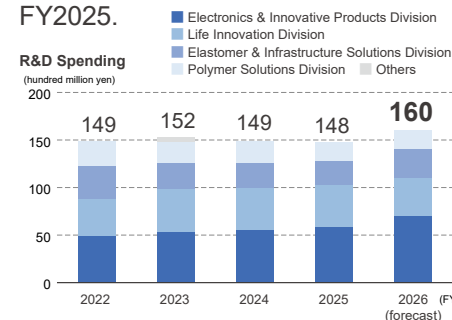
New Business Creation Department

Denka Innovation Center

R&D sites

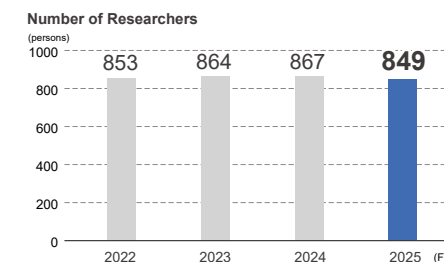
### R&D Spending (Consolidated)

R&D spending averaged 15.0 billion yen per year from FY2022 to FY2024 and totaled 14.8 billion yen in FY2025.



### Number of Researchers (Consolidated)

The number of researchers in FY2025 was 849.



# Intellectual Property Initiatives

## 1 Intellectual Property Vision

### MISSION

Provide high-value-added intangible assets to directly and indirectly increase the corporate value.

### PURPOSE

To serve as a compass to guide to business value creation through merging IP and our specialties.

### CORE VALUE

Specialty: Each individual becomes a human resource with unique value.  
Diversity: Acknowledge and empathize with different backgrounds and viewpoints to grow together.  
Co-creation: Respect each other and tackle work with integrity.

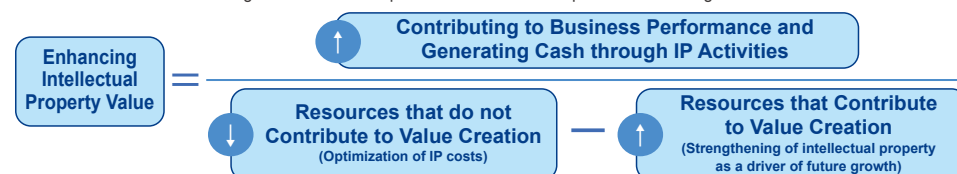
## 2 Activities to Maximize Intellectual Property Value

### (1) Intellectual Property Strategy for Achieving Management Plan "Mission 2030"

We position intellectual property as a key management resource supporting business stability and sustainable growth, and we are working on strengthening it.

Our intellectual property activities previously focused on protecting research results and products under development. Today, we assign IP personnel to business and research divisions, where they work with the Intellectual Property Department in a three-way partnership. This has shifted our activities toward contributing to business value creation.

We also hold annual Departmental IP Strategy Committee meetings to discuss medium- to long-term IP strategies with the heads of each division and the relevant business and research units. Based on these discussions, we report to the Intellectual Property Strategy Council and the Board of Directors to promote IP portfolio management aligned with our business strategies. We are also optimizing our intellectual property holdings based on their contribution to value creation while strengthening the resources that will drive future growth. This will help contribute to business performance and generate cash.

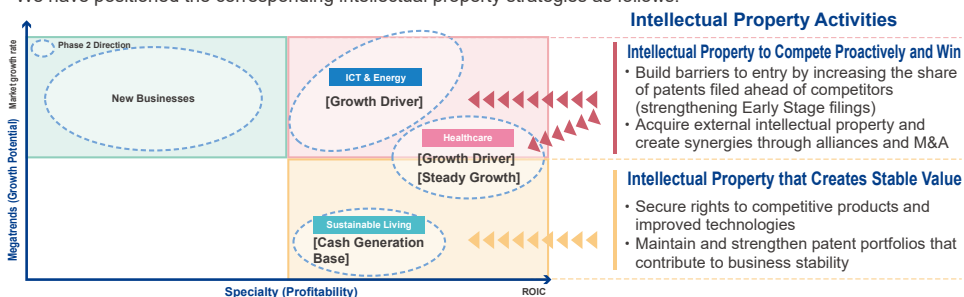


### (2) IP Activities to Realize Business Strategies

In "Mission 2030" Phase 2, we have established the following strategies for each business area.

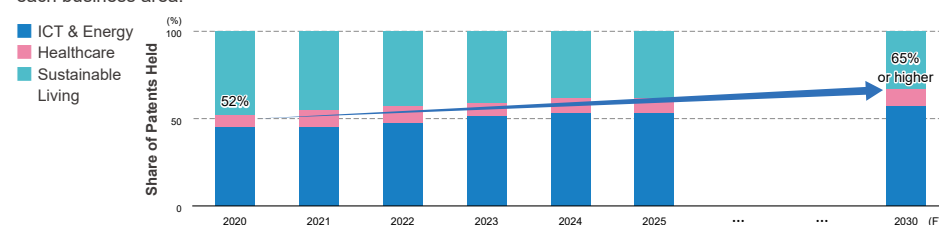
- **ICT & Energy:** Growth driver (growth investment area)
- **Healthcare:** Growth driver + steady growth (earnings expansion area)
- **Sustainable Living:** Cash generation base (portfolio restructuring area)

We have positioned the corresponding intellectual property strategies as follows.



We also continuously optimize our IP portfolio throughout the Company by selecting priority areas and concentrating resources, while shifting resource allocation toward strategic fields. As a result, the share of our patents in ICT & Energy and Healthcare has increased from 52% in FY2020, demonstrating progress in shifting our portfolio toward growth areas.

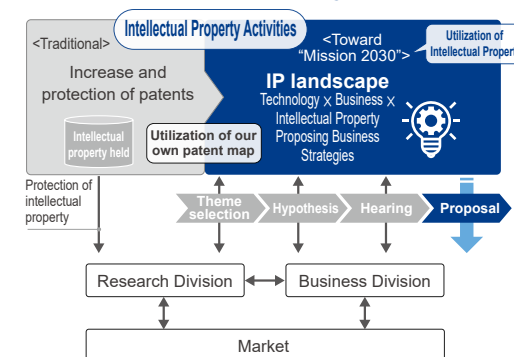
We will continue rebuilding our earning power through intellectual property initiatives tailored to the strategy of each business area.



### (3) Utilization of IP Landscape: "Proactive Use of Intellectual Property"

As the importance of IP information has increased in Japan, the use of the IP landscape has become widespread throughout the intellectual property field from around 2018. We began our own activities in 2020.

Today, we use generative AI to analyze a broad range of IP information and propose business strategies that integrate technology, business, and intellectual property. In addition to providing information that supports M&A, we are exploring adjacent fields that build on the strengths of our existing businesses. Through these activities, we are working to make our intellectual property strategy a driving force for ongoing innovation.



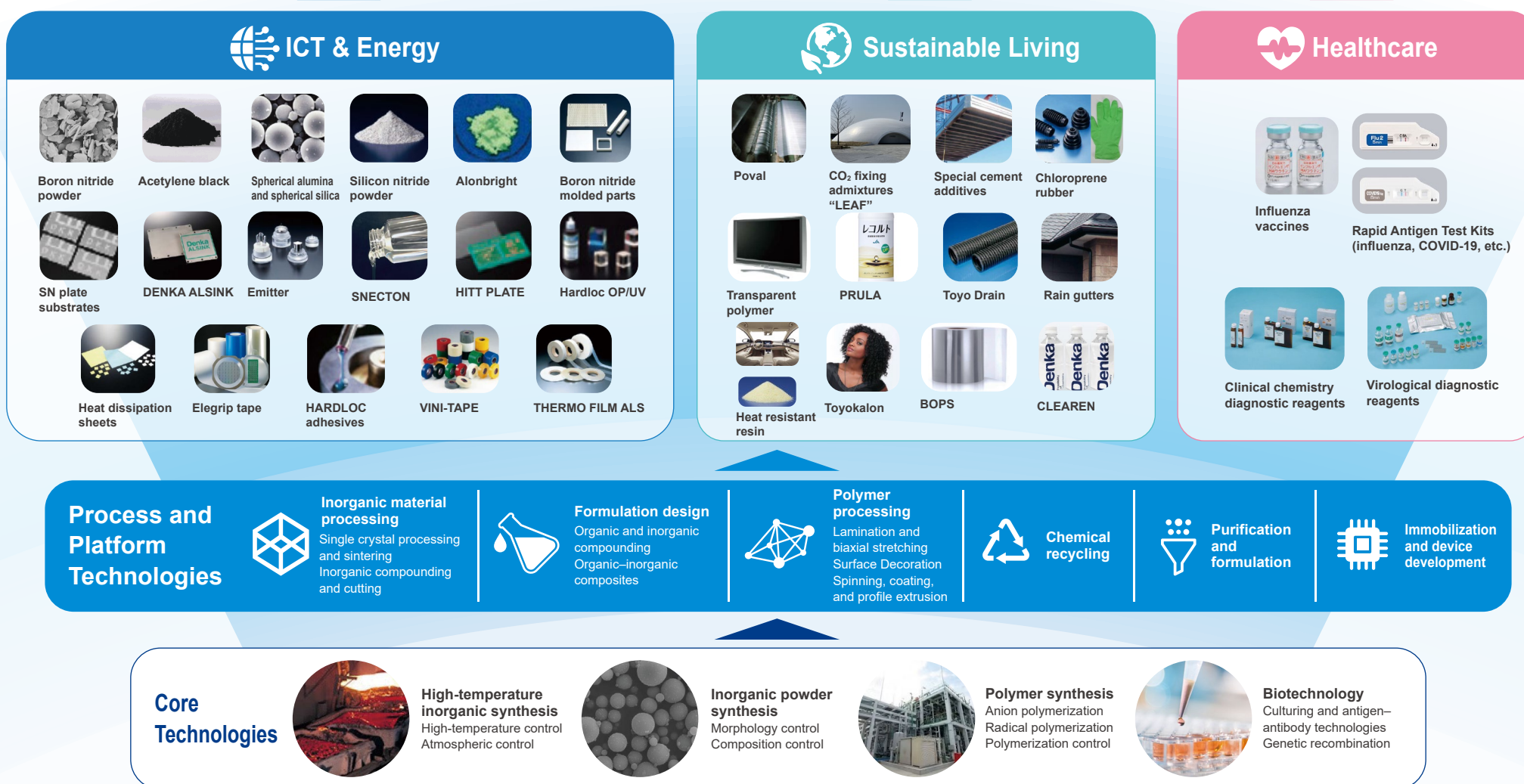
## 3 External Recognition

Our intellectual property has earned high ratings: Denka ranked 11th in LexisNexis Patent Value Growth Ranking in 2025 and seventh in Patent Result Chemical Industry Patent Asset Size Ranking 2025. These results provide objective evidence of the strength of our intellectual property.

## Technology Platform Diagram

### Building on Our Core Technologies to Expand Value Creation and Shape the Future

The core technologies we have cultivated over many years are among the intangible assets that underpin Denka's value creation. Honed through our efforts to solve social challenges, these technologies have given rise to a wide range of businesses and products. We will integrate and further develop our core technologies and process and platform technologies to create new products and value, primarily in our three focus areas that we have aligned with megatrends.



## New Business Creation Initiatives for 10 New Business Themes

We are continuously working to generate themes for new businesses, centered on ICT & Energy, Healthcare, and Sustainable Living. We are aiming to create value with commercialization in mind, by combining our core technologies with open innovation involving startups, academia, and others. We position these themes as part of our medium- to long-term strategy to support our business portfolio beyond fiscal 2030, and will pursue sustainable growth and strengthen our earnings base.

Hikari  
Uchida

Denka Innovation  
Center  
New Materials  
Research  
Department



### 3. Next-generation High-heat dissipation Filler (Core Technology x Startup Collaboration)

Based on our core technologies, we are working with startups to enhance thermal conductivity and reliability and strengthen our competitive advantage. In addition to jointly developing boron nitride nanotubes (BNNT), we are specifically working to improve performance through diverse approaches, including the development of composite materials and surface modification technologies using coatings.

Ayako  
Kakegawa

New Business  
Creation Department



### 5. Aerospace Materials (Core Technology x Open Innovation)

As ecosystem development for space exploration accelerates around the world, we are advancing development of materials for extreme environments by evolving our distinctive core inorganic materials technologies through open innovation. With this, we are aiming to contribute to global space development.

Yuka  
Yamashita

New Business  
Creation Department



### 6. Materials for Beyond-next-generation Communications (Core Technology x Academia)

We are advancing development of next-generation resins with low dielectric constants and low dissipation factors in collaboration with academia, with an eye toward the commercialization of 6G after 2030. By advancing our proprietary core technologies, we aim to commercialize materials that reduce signal transmission loss in high-frequency bands and support the further evolution of high-speed communications.

Yuuya  
Nakamura

Organic Materials  
Research  
Department



### 8. Applying Existing Materials to Biofunctional Materials (Core Technology)

We are advancing development of biofunctional materials by combining Denka's core expertise in organic, inorganic, and biotechnology fields. In addition to improving quality of life (QoL) in personal care, we are developing materials that support regenerative medicine in the cell culture field and generating themes that are expected to drive Denka's future businesses.

New Business Creation Department



Keigo  
Kajiwara   Takafumi  
Harada   Lee  
Shin Yong

### 9. Digital Diagnostics (Core Technology x Startup Collaboration)

We are improving diagnostic accuracy and advancing disease management, by combining our core in-vitro diagnostic technologies with startups' digital and AI technologies. Through new value creation based on data, we are strengthening our ability to respond to medical needs.

## ICT & Energy

### Phase 2 (FY2026–FY2028)

1. Conductive polymer (CVC: Create Value)
2. High-performance, multi-functional resin (CVC: Ares Materials)
3. Next-generation high thermal conductivity filler (CVC: NaiEEL Technology)
4. Materials for next-generation energy

Cutting-edge thermal management  
Advanced semiconductors and  
power infrastructure

### Phase 3 (FY2029–FY2030)

5. Aerospace materials
6. Materials for next-generation communications (academia)

2031–

Expansion into high-reliability fields:  
Phased expansion of applications  
in response to increasingly  
demanding operating environments

## Healthcare/Sustainable Living

### Phase 2 (FY2026–FY2028)

7. Technology licensing
8. Application of existing materials to biofunctional materials (academia)
9. Digital diagnostics (CVC: Avice Health)

Strengthen and expand the  
diagnostics and IVD reagent  
business

### Phase 3 (FY2029–FY2030)

10. CO<sub>2</sub> utilization technology (academia)

2031–

Expand into sustainable health and  
personal care fields through application  
of materials technologies