### **Integrated Innovation Strategy 2025 (Summary)**

• As an annual strategy for the 5th year of the 6th Science, Technology and Innovation Basic Plan (FY2021-FY2025), we will complete the 6th Basic Plan, taking into account changes in domestic and international circumstances and trends in science, technology and innovation. At the same time, based on the discussions for the 7th Science and Technology Innovation Basic Plan, the Government will promote initiatives, including perspectives such as strengthening governance in science, technology and innovation policy.

### <Promotion of Initiatives as the Final Stage of the 6th Basic Plan>

# Strategic Promotion of Advanced Science and Technologies

#### Strategic Promotion of Key Fields

- Promote AI innovation while mitigating risks; Promote development and introduction of next-generation information and communication infrastructures
- Promote R&D on quantum, fusion energy, materials, biotechnology, etc.
- Promote the fields of health and medicine, space, ocean, food, agriculture, forestry and fisheries, and environment and energy

## • Strengthening Initiatives Related to Economic Security

- R&D support through the K program
- Realization of the establishment of a think tank on safety and security

#### Promotion of R&D and Social Implementation

- Promote SIP, BRIDGE, and Moonshot R&D Program
- Promote R&D to strengthen disaster response capabilities

# Enhancement of Knowledge Bases (Research Capabilities) and HR Development

- Supporting for Universities for International Research Excellence and Regional Core Universities, etc.
- Start the 2nd call for applications and grants for Universities for International Research Excellence.
- Support through the Package for Comprehensive Promotion of Research Universities with a Regional Core and Distinctive Characteristics
- Further strengthen research capabilities by securing basic expenses and through competitive research funds such as KAKENHI (Grant-in-Aid for Scientific Research)
- Upgrading Research Facilities, Promoting Open Science
- Promote upgrading and sharing of research facilities
- Promote open access to publicly funded scholarly publications and scientific data
- Promoting Human Resource Development and Activities
- Promote activities of doctoral human resources in industry based on action plans by industry and academia

### **Creation of Innovation Ecosystems**

#### • R&D Startup Support

- Ongoing support through the SBIR program, etc.
- Promote public procurement from startups
- Cooperation among Cities, Regions, Universities, etc.
- Support to strengthen and globalize Startup Ecosystem Startup Cities
- Promote industry-academia collaboration and open innovation
- Promote the Global Startup Campus Initiative
- Promoting a Virtuous Cycle of Human Resources, Technology, and Funds
- Develop human resources to support innovation, etc.

#### <Promotion of Initiatives Based on Discussions for the 7th Basic Plan>

### Strengthening Linkages with Economic Security

- ✓ Promote R&D of key technologies
- ✓ Promote global strategy
- ✓ Thoroughly implement research security and integrity initiatives

### Strengthening Research Capabilities, Developing and Securing Human Resources

- ✓ Strengthen the operational and research infrastructure of universities and other institutions
- ✓ Develop and secure human resources and support young researchers
- Promote international talent mobility and circulation and internationalization of research

### Improving Innovation Capability

- ✓ Promote regional innovation
- ✓ Promote IP and international standards strategy
- ✓ Promote R&D investment and other initiatives in strategic technology areas

### (Reference) Integrated Innovation Strategy

- The Integrated Innovation Strategy is formulated each year as an annual strategy based on the Science, Technology and Innovation Basic Plan.
- Based on the medium- to long-term policy directions outlined in the Basic Plan, this strategy summarizes policies
  and measures that should be prioritized.

### <Outline of the Integrated Innovation Strategy in the 6th Science, Technology and Innovation Basic Plan (FY2021-2025)>

### Integrated Innovation Strategy 2021

The following priority measures were promoted:

- Transformation into a sustainable and resilient society that ensures safety and security
- Exploring the frontiers of knowledge, strengthening research capabilities
- Education and human resource development to realize diverse happiness and solutions to challenges
- Sector-specific strategies through public-private partnerships
- Stimulation of capital circulation
- Strengthening leadership function

### Integrated Innovation Strategy 2022

The three pillars of science, technology, and innovation policy were as follows:

- Enhancement of knowledge bases (research capabilities) and HR development
- Creation of innovation ecosystems
- Strategic promotion of advanced science and technology

In addition to these pillars, the Government promoted R&D that was directly linked to winning strategies through collaboration among sector-specific strategies.

## Integrated Innovation Strategy 2023

The three cornerstones of science, technology, and innovation policy were as follows:

- Strategic promotion of advanced science and technology
- Enhancement of knowledge bases (research capabilities) and HR development
- Creation of innovation ecosystems

In addition to promoting these three cornerstones, the Government also promoted the strengthening of the functions of national research and development agencies and FAs to support the cornerstones.

### Integrated Innovation Strategy 2024

Three strengthening measures were as follows:

- Integrated strategies for key technologies
- Strengthening collaboration from a global perspective
- Enhancing competitiveness and ensuring safety and security in the AI sector

In addition to promoting these measures, the Government continued to steadily promote policies based on the existing three pillars.

### (Reference) Progress of the 6th Science, Technology and Innovation Basic Plan

tentative translation (As of June 6, 2025)

- Currently, based on the 6th Science, Technology and Innovation Basic Plan (approved by the Cabinet on March 26, 2021), the Government promotes specific initiatives based on the following three pillars: (1) strategic promotion of advanced science and technology, (2) enhancement of knowledge bases (research capability) and HR development, and (3) creation of innovation ecosystems.
- Specifically, the Government is working to launch the Key and Advanced Technology R&D through Cross Community Collaboration Program (K Program), establish a 10-trillion-yen University Endowment Fund and begin providing grants to Tohoku University, and fundamentally expand the SBIR system.

# Strategic Promotion of Advanced Science and Technology

#### <Activities Based on Sector-specific Strategies>

- Al Strategy Council/ Al Institutional Study Group Interim Report (February 2025)
- The Bill on Promotion of Research and Development, and Utilization of Artificial Intelligence-related Technology (The Bill of the Al Act) (approved by the Cabinet in February 2025)
- Global Research and Development Center for Business by Quantum-Al technology (G-QuAT) (established in July 2023)
- Japan Fusion Energy Council (J-Fusion) (established in March 2024),
   Basic Approach to Ensuring Safety in Realizing Fusion Energy (decided in March 2025)

#### <Activities to Ensure Safety and Security>

- Launch of the K program (FY2021/2022 supplementary budget totaling 500 billion yen), R&D Vision (Phase 1: formulated in September 2022, Phase 2: formulated in August 2023, revised in March 2025)
- Preparation for the establishment of a think tank on safety and security

#### <Strengthening R&D and Social Implementation>

- SIP Phase 3 (initial budget totaling 84 billion yen from FY2023 to FY2025), BRIDGE (initial budget totaling 30 billion yen from FY2023 to FY2025)
- Promotion of the Moonshot R&D Program (FY2018 supplementary budget to FY2024 supplementary budget totaling 411.4 billion yen)

# Enhancement of Knowledge Bases (Research Capabilities) and HR Development

## <Strengthening Research Infrastructure and University Reform>

- Support for Universities for International Research Excellence through a 10-trillion-yen University Endowment Fund (funding for Tohoku University to begin in February 2025)
- Support through the Package for Comprehensive Promotion of Research Universities with a Regional Core and Distinctive Characteristics (updated in February 2025), including the adoption of J-PEAKS (25 projects in total)

#### <Pre><Pre>romotion of HR Development and Activities>

 Promotion of the activities of doctoral human resources in industry, including the compilation of an action plan by industry and academia (July 2024)

#### <Collaboration with Like-minded Countries and Partner Countries>

- International collaboration (G7 Sendai Science and Technology Ministerial Meeting, etc.)
- National Open Access Policy (formulated in February 2024)
- Ensuring research security and integrity
   (Implementation of model projects to develop guidelines (open call for applications in February 2025 ))

### **Creation of Innovation Ecosystems**

### <Startup Development>

- Promotion of Global Startup Acceleration programs
- Strengthening of the functions of Startup Ecosystem Startup Cities (8 locations)
- Fundamental expansion of the SBIR system (FY2022 supplemental budget of 206 billion ven)
- Promotion of public procurement from startups
- Basic policy for the Global Startup Campus Initiative (formulated August 2024)