

## Key Elements

### Why is it needed?

Japan faces numerous challenges such as rapid population decline, aging, and global environmental issues. Among these challenges, the most important and urgent issue is **“economic recovery”**.  
→ **High expectation is placed on science, technology and innovation** for overcoming these challenges.

- ✓ Change the way of thinking, and conduct **exit-oriented problem-solving policy management** focusing on the contribution of the results of science, technology and innovation to the realization of an ideal economic society
- ✓ Create **“the world’s most innovation-friendly country”**

### Basic Concepts

(1) Long-term vision including the whole picture of science, technology and innovation policies + immediate action programs

(2) Comprehensive package of problem-solving science, technology and innovation policies

(3) Clarified roles and responsible ministries in industry-academia-government cooperation; A combination of various policies such as budgeting, taxing and regulatory reforms

### Reinforcing headquarter functions of the Council for Science and Technology Policy (CSTP)

\* Tentative names

#### Establishment of **“Science and Technology Budgeting Strategy Committee”**\*\*

(Initiative in science and technology budgeting for the whole government)

Introducing a new mechanism that enables CSTP to take the lead in selective allocation, etc., of the budget for the whole government from the budget request compilation stages

#### Establishment of **“Strategic Innovation Creation Program”**\*\*

(Creation of a cross-ministry program for promoting innovations)

Selective cross-ministry budget allocation directly conducted by CSTP for addressing priority issues, which is added to the budget of the Cabinet Office

#### Establishment of **“Innovative Research and Development Support Program”**\*\*

(New development of policies following the FIRST Program)

Selection of innovative high-impact researches from a long-term perspective and bold promotion under the responsibility of authorized program managers

## Overall Structure

### Chapter 1 Toward Establishing a Nation on Science, Technology and Innovation

#### < Shapes of the Nation to Be Attained in 2030 >

Economy that maintains the world-top-class economic strength and develops sustainably

Society where the people can enjoy wellness, security and safety

Economic society that harmonizes with the world and contributes to the progress of humankind

Three perspectives for promoting STI policies

- Acting Smart
- Implementing System thinking
- Globalization

### Chapter 2 Challenges to Be Addressed by Science, Technology and Innovation

#### I. Realization of a Clean and Economic Energy System

##### Focused Policy Challenges

- Stable and low-cost supply of clean energy
- Improved utilization efficiency and consumption reduction through new technologies

##### Main Measures (examples)

- Improving efficiency of floating offshore wind power generation and thermal generation
- Developing innovative devices (motors, information systems, etc.)

#### II. Realization of Healthy and Active Aging Society as a Top-runner in the World

##### Focused Policy Challenges

- Extension of longevity
- Healthy growth of children to be responsible for the next generation; etc.

##### Main Measures (examples)

- Developing innovative methods of prevention, diagnosis and treatment of cancer, etc.
- Developing brain machine interface and equipment related to home care and nursing

#### III. Development of Next Generation Infrastructures as a Top-runner in the World

##### Focused Policy Challenges

- Ensuring safety and security of the infrastructures
- Reinforcing resilient function for preventing and mitigating disasters

##### Main Measures (examples)

- Developing infrastructure inspection and diagnosis technologies
- Developing advanced technologies for seismic capacity, etc.

#### IV. Regional Revitalization Taking Advantage of Regional Resources

##### Focused Policy Challenges

- Reinforcing agriculture, forestry, and fisheries through the utilization of science, technology and innovation
- Developing mechanisms for the creation of innovation coming from regions

##### Main Measures (examples)

- Sophisticating production systems of agriculture, forestry, and fishery products by IT and robotic technologies, etc.
- Nurturing industrial competitiveness through the utilization of producing technologies, etc.

#### V. Early Recovery and Revitalization from the Great East Japan Earthquake

##### Focused Policy Challenges

- Realizing a society where residents' health are protected from disasters and children and the elderly people are sound and healthy
- Developing new business models in local industries, etc.

##### Main Measures (examples)

- Quick and appropriate provision of medical care to disaster victims and maintenance of their health
- Regeneration of highly competitive agriculture, forestry, and fishery industries

### Chapter 3 Creating Environment Suited for Science, Technology and Innovation

The following issues will be prioritized for enhancing the effectiveness of the issue-resolving activities for the economic society described in Chapter 2 as well as for establishing the basis for swift innovative creations.

#### Nurturing the sprouts of innovation

- Establishing an environment which enables diverse people to take the leadership in enterprises, universities and R&D corporations
- Reinforcing universities and R&D corporations as international hubs
- Restructuring systems of competitive funds

#### Activating the innovation system

- Reinforcing industry-academia-government and inter-ministry collaboration
- Promoting mobility of human resources
- Improving research support system

#### Fructifying innovations

- Activating private enterprises engaging in new projects
- Promoting regulatory reform
- Reinforcing the strategies for international standardization and IP

### Chapter 4 Reinforcing Headquarter Functions of CSTP

In addition to the above, the following measures will be promoted.

- Reinforcement of the secretariat (strengthening the workforce of the secretariat, and the function of investigation and analysis (think tanks)
- Activating CSTP

- Exertion of CSTP's “comprehensiveness”
- Budgetary provision and law revisions for reinforcing the headquarter functions