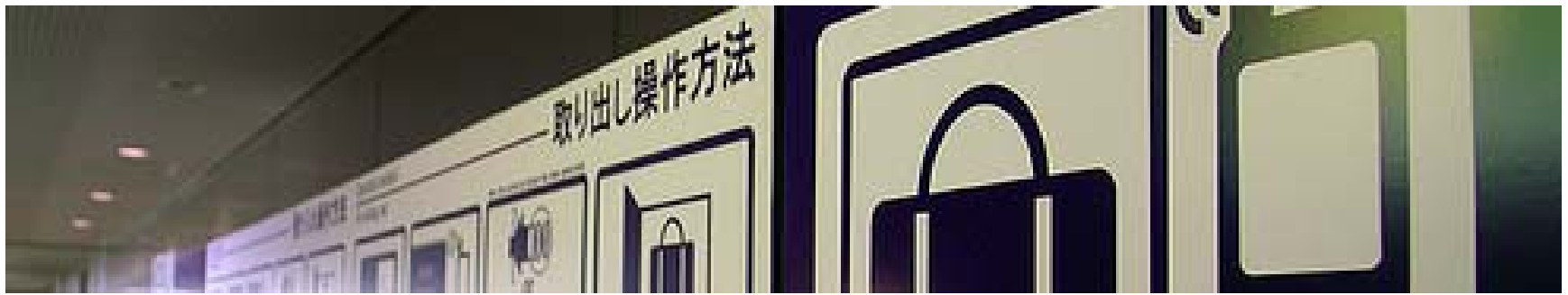


# Knowledge Clusters in 日本



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## Agenda

### S&T - R&D in Japan

- S&T - R&D in Japan
- Knowledge-Cluster Initiative
- Industrial-Cluster Project





## S&T Basic Law (November, 1995)

### S&T Basic Plan

- The 1<sup>st</sup> (FY1996 - FY2000)
- The 2<sup>nd</sup> (FY2001 - FY2005)
- The 3<sup>rd</sup> (FY2006 - FY2010)

### Changes of Administrative System

- Establishment of **Council for S&T Policy (CSTP)** (January, 2001)
- Reorganization of Central Government Ministries (January, 2001)
- Incorporation of **National Universities** etc. (April, 2004)
- Incorporation of **National Research Institutes** etc.

The top banner features a close-up of the Japanese flag, showing the white field and the red sun disk. The text 'S&T Policy Makers' is written in red, with '日本' (Japan) in black below it.

S&T  
Policy Makers  
日本

Prime Minister

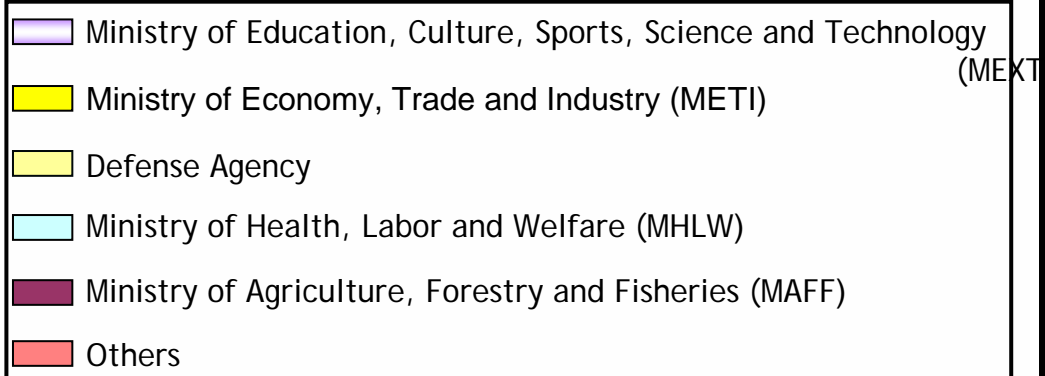
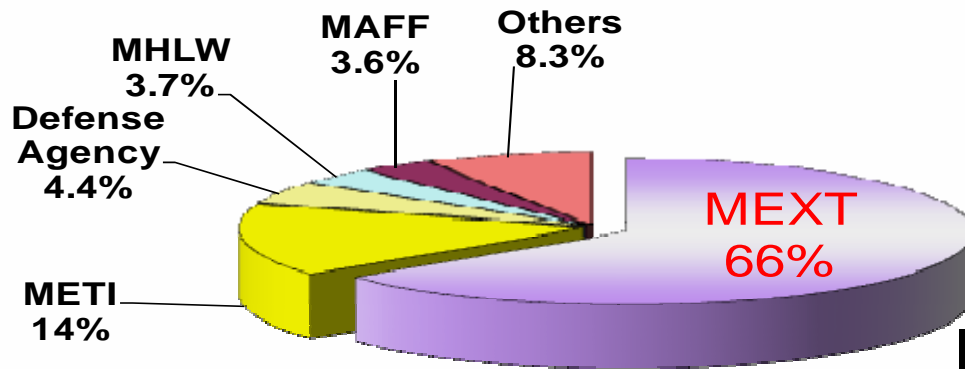
Cabinet Office

Council for Science and Technology Policy (**CSTP**)  
S&T Basic Plan, Resource Allocation Policy .....

Ministry of Education, Culture, Sports,  
Science and Technology (**MEXT**), which

- cooperates with other Ministries
- promotes Universities, Research Centers and Research Agencies and their engagement in cooperation

# S&T Public Budget FY2007



NOTE The exchange rate : 1 USD = 120 JPY

Ministry	S&T-Related Budget	
	(tri. JPY)	(bln USD)
MEXT	2.31	( 19.30 )
METI	0.50	( 4.20 )
Defense Agency	0.15	( 1.40 )
MHLW	0.13	( 1.10 )
MAFF	0.12	( 1.10 )
Others	0.28	( 2.31 )
<b>Total</b>	<b>3.51</b>	<b>( 29.26 )</b>

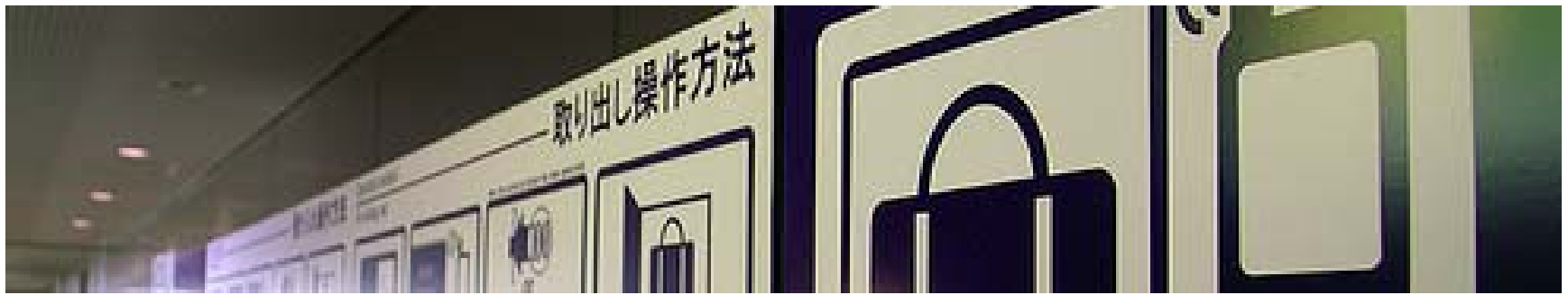


## 2. Enhancement of Basic Research

### Enhancement of Basic Research and Innovation System

Securing diversity in basic research and contribute to expanding humankind's intellectual assets.

Creating a continuous cycle of innovation creation and returning research fruits to society by offering seamless support from the creation of knowledge to advanced activities using it.



## Agenda

### Knowledge Cluster

- S&T - R&D in Japan
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## Knowledge-Cluster Initiative

“Enhancement of Basic Research and Strengthening Innovation System” program tools for engagement:

- Creative and Advanced Basic Research
- Expanding Competitive Research Funds
- Strengthening the System to Create Innovation
  1. *Creation of technology seeds derived from basic research*
  2. *Full realization and acceleration of I-A-G Collaboration*
  3. *Enhancement of regional innovation (Knowledge Cluster Initiative)*
- Enhancement of base to promote S&T





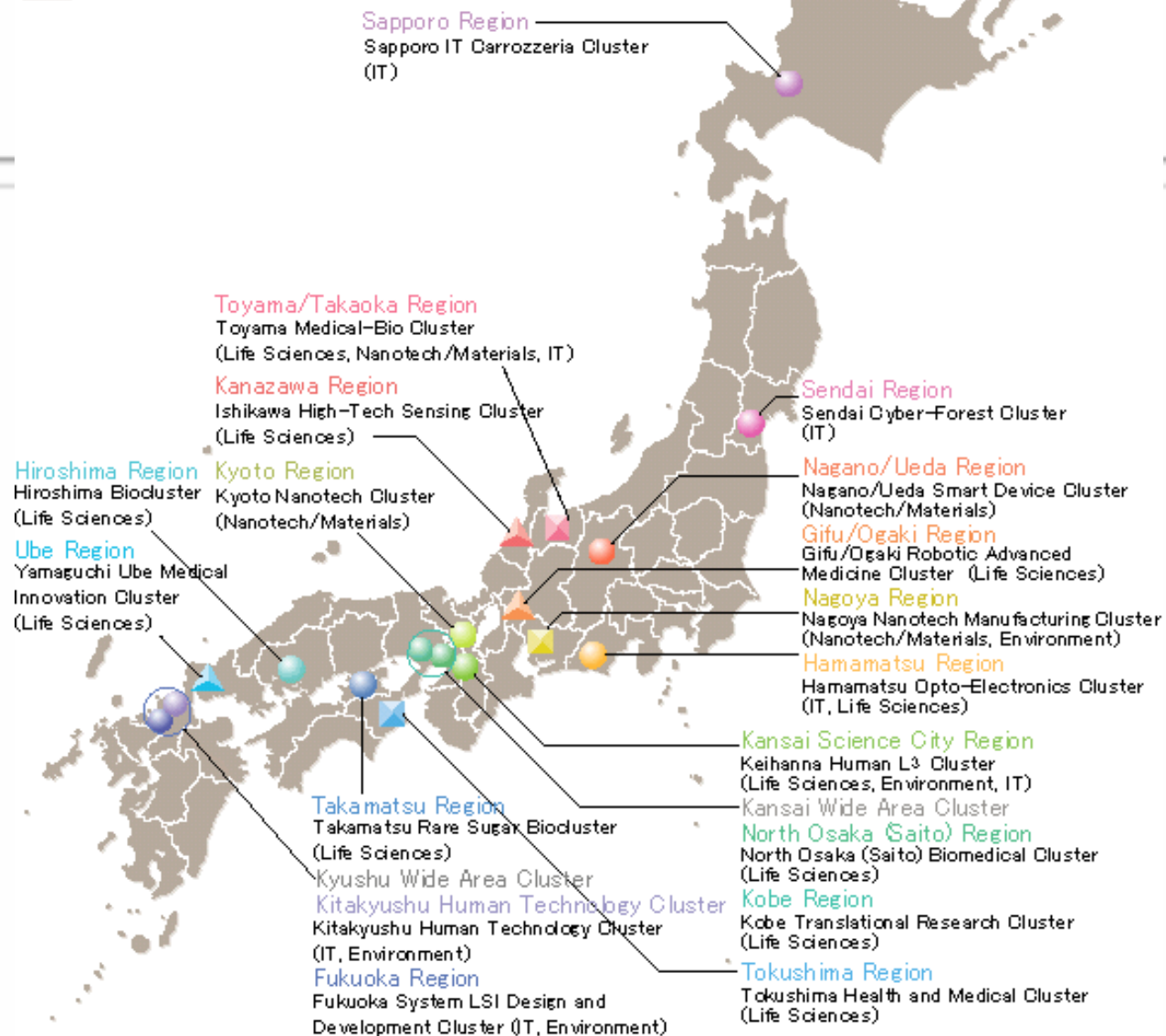
## Knowledge-Cluster Initiative: Phase 1

1. Purpose: to achieve a concentration of knowledge (Knowledge Cluster) while stressing the initiative of local government. Such clusters will enable internationally competitive technological innovation by relevant research organizations and R&D-based corporations, around the core of universities and public research organizations which serve as the base of knowledge creation.
2. Budgetary measures: the scale of the project is roughly 500 million yen per year for each region, over five years to support for the core organizations (science and technology foundations etc.) designated by local governments to be in charge of implementing each project.

● Regions implementing projects (Start of 2002: 12 regions)

◀ Regions implementing projects (Start of 2003: 3 regions)

▲ Regions implementing projects (Start of 2004: 3 regions)





## Knowledge-Cluster Initiative: Phase 2

### The KCI Phase 2 revision

After 5 years KCI was assessed and accordingly revised

### The KCI Phase 2 rationale

International-level innovation is being achieved by concentrating research institutes, R&D-oriented companies and other participants around cores institutes of universities (the centers of knowledge creation) and public research

### The KCI Phase 2 approach

“Selection and Concentration”



## Knowledge-Cluster Initiative: Phase 2

The “Selection and Concentration” approach

(1) Flexible Budget Allocations

The second stage will be carried out in six regions from fiscal Year 2007. (About 500 million to 1 billion yen per year per region)

(2) Promotion of Regional Autonomy

(3) Adjustment with National Strategies

(4) Promotion of Expansion and Internationalization

Out 18 clusters initiated, 11 were “put to sleep” ...  
While 6 new (meta-)clusters were created

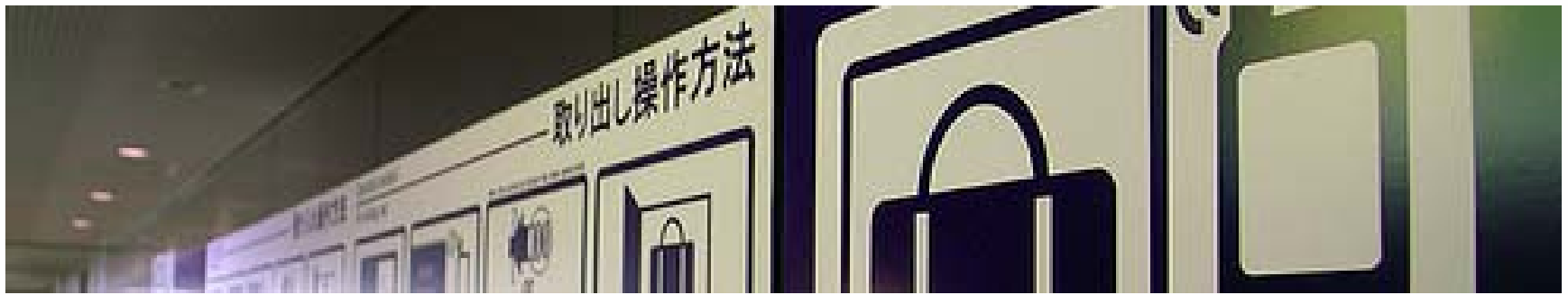


## Knowledge-Industrial Clusters Cooperation

### Cooperation with Industrial Cluster Project by METI

- Setting up committees for regional cluster promotion
- Encouraging cooperation between local implementing organizations
- Holding joint-conferences to announce project results

About 0,1 billion Yen (USD 900 k) is set aside annually out of the total budget allocated by MEXT to the KCI for cooperation with other relevant ministries



## Agenda

### Industrial Cluster

- ❖ S&T - R&D in Japan
- ❖ Knowledge-Cluster Initiative
- ❖ Industrial-Cluster Project





## Industrial-Cluster Program

METI-Minister of Economy, Trade and Industry has been promoting the “Industrial Cluster Program” since FY2001 to form industrial clusters for bringing about a stream of innovation and venture companies in regions.

Presently, 17 projects nationwide (originally 19), with the joint cooperation of regional Bureaus of Economy, Trade, and Industry and promotion organizations of the private-sector, are building close cooperative relations with about 9,800 regional SMEs taking on the challenge of new businesses and researchers etc. from more than 290 universities.



## Industrial-Cluster Program

While forming industry-university-government networks, promoting the formation of industrial clusters that develop one after another new businesses that will be viable throughout the world, through comprehensively and effectively introducing various kinds of support measures.

Also, functionally supporting the strengthening of organizational power, by providing in a timely manner information necessary for the dynamic operation of the networks.

As an average METI allocates about 50 billion yen as the budget related to these activities for fiscal year.





## Industrial Cluster

To strengthen Japan's global competitiveness and help local economies become more active, Industrial Clusters are created with the objective of having:

- businesses and universities form, in regions all through Japan, broad-area networks for partnerships between businesses, universities and government agencies, between businesses, and between different industries,
- networks, which allow participants to use their intellectual and other resources together, achieve conditions where new industries and businesses are created (the conditions to be known as industrial clusters).



## Industrial Cluster

Areas of engagement:

1. Development of a business environment to promote innovation
2. Creation of new businesses designated as important fields in national strategies\* such as the "New Economic Growth Strategy"
3. Synergistic effects with local industry promotion implemented by municipalities

\*Strategic fields in the "New Economic Growth Strategy": Fuel cells, intelligent household appliances, robots, contents, healthcare/welfare, environment/energy.

**Thank You**

