

The Creation of Intellectual Clusters in Japan

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History and Results of Industry-Academy Cooperation Measures

1995 The Science and Technology Basic Law

1996 The Science and Technology Basic Plan

**1998 The Law Promoting Technology Transfer from
Universities to industry (TLO Law)**

of Approved TLO **32** [As of April 2003]

of Application of Patent **2,361** [As of December 2002]

**1999 The Law on Special Measures for Industrial
Revitalizing**

2000 The Law to Strengthen Industrial Technology

2001 The Science and Technology Basic Plan(2nd Pried)

2002 Outline for Intellectual Property Strategy

Basic Law on Intellectual Property

2003 National University Corporation Law (under discussion)

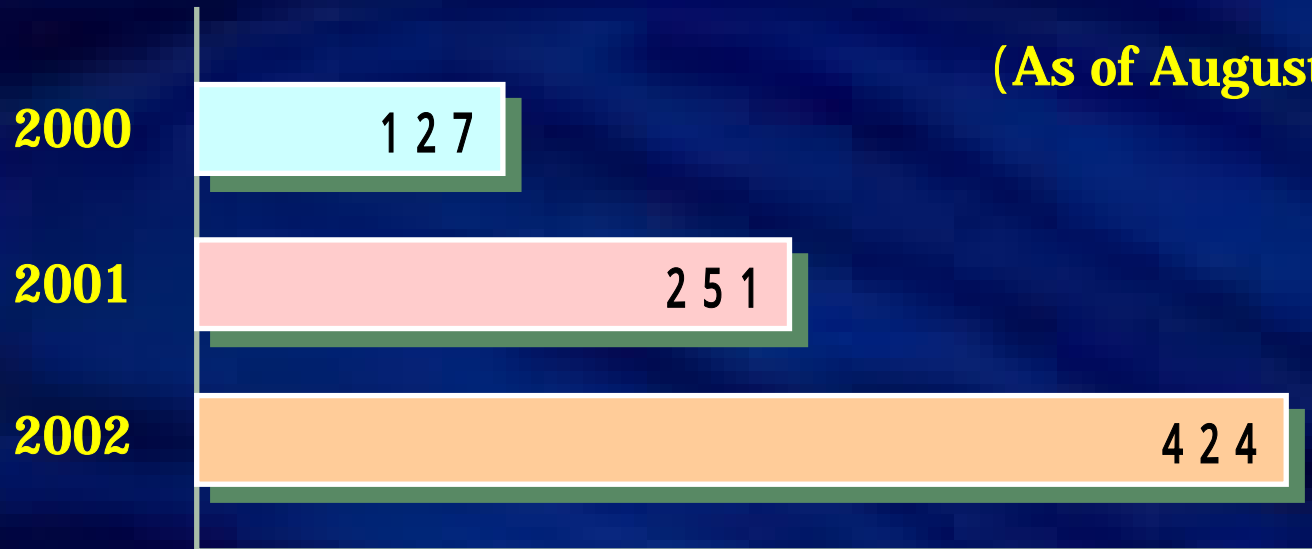
History and Results of Industry-Academy Cooperation Measures

**National university's increase of number
in cooperation with industry.**

	FY1991	FY2001	Growth
# of Joint Research	1,139	5,264	4.6
# of Centers for Cooperative Research	23	62	4.7

Accumulative Number of Small (Venture) Business Companies from Universities

(As of August 2002)



Number of Venture Business Companies
from Universities in other countries (annually)

USA (2000) 368 companies

from 'AUTM Licensing Survey FY1998'

UK (1996) 46 companies

from 'Industry-University Co-operation Survey,
1996'

The University-based Structural Reform Plan for Revitalizing Japanese Economy (June 2001)

- ▶▶ **Creating Universities that Conform the Highest International Standards**
 - (1) Thorough Competition based on Evaluation
 - (2) Accelerating the Creation of New Industry Originating in University
 - (3) Changing the Management of National Universities by applying Private Sector Principal
- ▶▶ **Create Affluent Talent State**
 - (1) Foster World-Class Experts
 - (2) Foster Personnel who can Cope with Social and Employment Change
- ▶▶ **Revitalize Cities and Regions**
 - (1) Transform Universities Integrated with Cities and Regions

Overview of Industry-Academy Cooperation Measures

-Revitalize Japanese Economy by Supporting Industry-Academy Corporation -

➤ Promote Steadily Industry-Academy Cooperation

- (1) Support Venture Companies from Universities
- (2) Promote Joint Research by Matching Fund
- (3) Support Industry-Academy Cooperation

➤ Promote Regional Science and Technology

- (1) Create Intellectual Clusters (CLUSTER)
- (2) Create Industry-Academy Cooperation in City Area (CITY AREA)

➤ Promote Intellectual Property Strategy

- (1) Establish University Intellectual Property Center
- (2) Establish Technology Transfer Support Center

Cooperative Link of Unique Science and Technology for Economy Revitalization (CLUSTER program(to establish intellectual clusters))

- Selected very high potential regions of the unique R&D field
- Promote several Industry-Academy-Public cooperative research programs intensively
- 13 CLUSTERS (15 regions)
 - ▶▶ The action plan made by the local government subjectively
 - ▶▶ Industry-Academics-Government cooperation in universities etc.
 - ▶▶ Intensive promotion of Industry-Academy-Public cooperative research program
 - ▶▶ Subsidize the central project organization, appointed by the prefecture, which manage the program (¥500 million per year per region, 5-year project)

Abstract

- (1) Setting up the headquarter of the “CLUSTER” (President, Project Director, Research Director).
- (2) Promoting Industry-Academy-Public joint researches in universities
- (3) Organizing Science and Technology Coordinators, patent attorneys as experts
- (4) Encouraging patenting outcomes of the program and promoting R&D to foster them
- (5) Holding forums and symposiums to present outcomes of the program

“CLUSTER” program

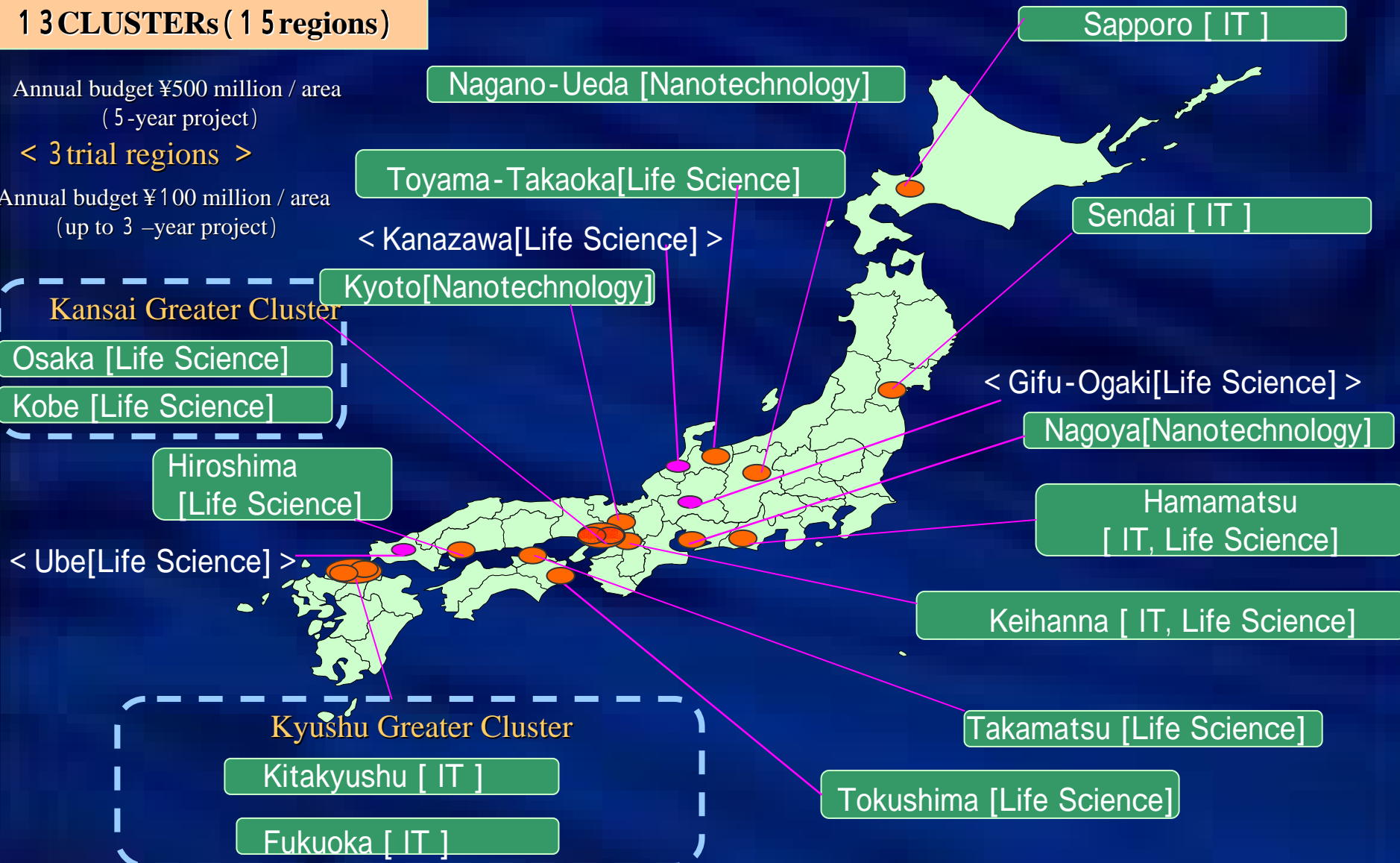
To create an innovative and internationally competitive regional base which agglomerates institutions, R&D industries and universities.

13 CLUSTERS (15 regions)

Annual budget ¥500 million / area
(5-year project)

< 3 trial regions >

Annual budget ¥100 million / area
(up to 3-year project)



Cooperation of Innovative Technology and Advanced Research in Evolutional Area (“CITY AREA” program)

- **Promote the Industry-Academy-Public cooperative research programs leaded by universities.**
- **Focus on the unique characteristic of the local region, the excellence of research theme, and the initiative of the local government**
- **19 areas**
 - ▶ **Subsidize the central project organization, appointed by the prefecture, which manage the program (Approximately ¥100 million per year per region, 3-year project)**
 - (1) Managing flexibly with paying attention to character of the region**
 - (2) Organizing Science and Technology Coordinators as experts**
 - (3) Promoting Industry-Academy-Public cooperative research program to generate new technologies**
 - (4) Supporting cooperative research aiming to industrialize outcomes from the program**

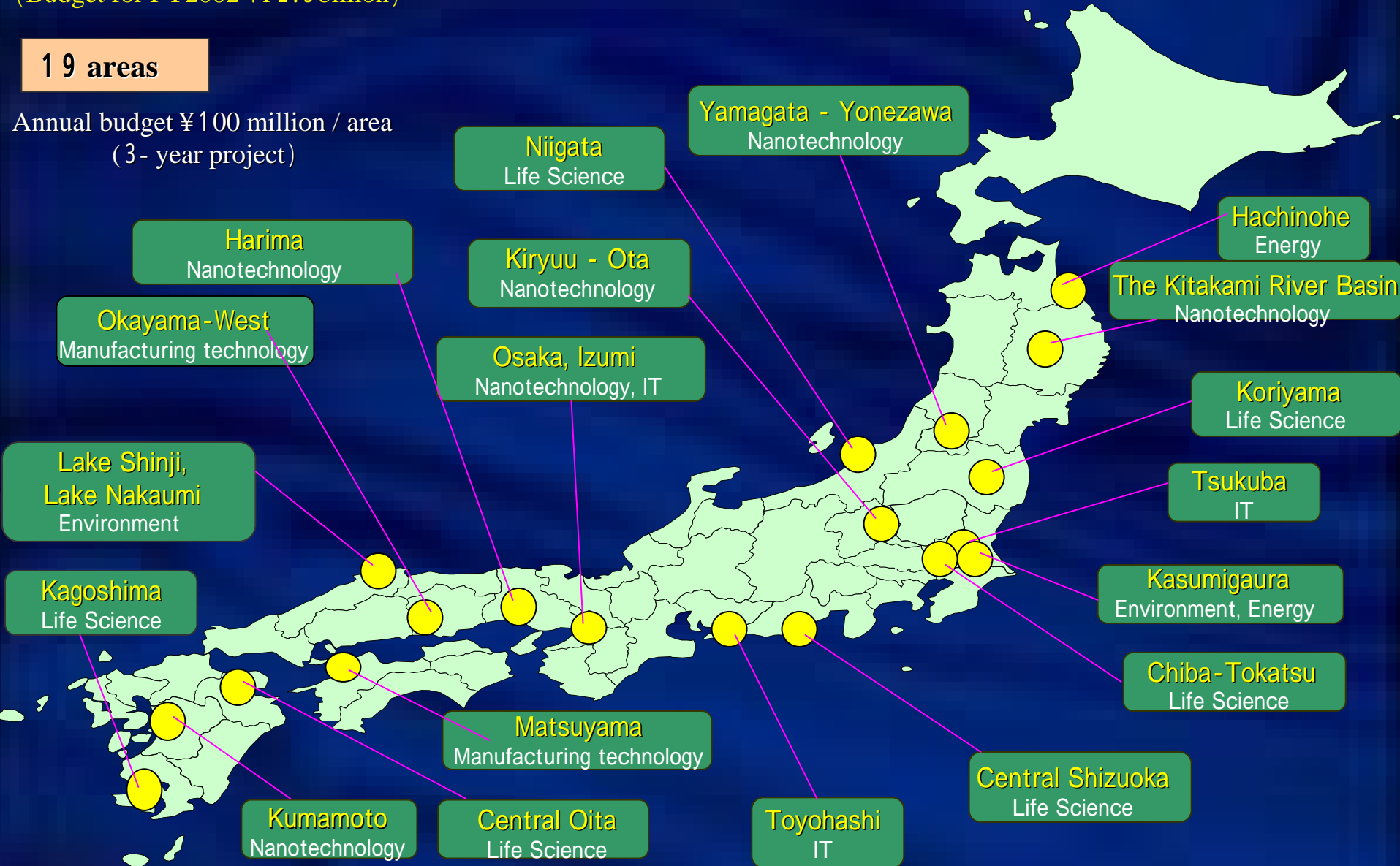
“CITY AREA” program

Budget for FY2003 : ¥3.1 billion
(Budget for FY2002 : ¥2.5 billion)

Promote Industry-Academy Public Cooperation in
smaller areas than Intellectual Cluster.

19 areas

Annual budget ¥100 million / area
(3 - year project)



Cooperation with METI (Ministry of Economy, Trade and Industry)

- 1 . Establish the “Conference for Promotion of the Regional Cluster”
- 2 . Cooperate between Central Project Organizations
- 3 . Hold the “Joint Symposium of Clusters”

Seeds of new technology

