

Success Breeds Success

The Ministry of Economy, Trade and Industry launched the Industrial Cluster Project in 2001 with the aim of fostering regional human networks that are simultaneously collaborative and competitive and that by their very nature increase productivity, induce innovation and develop new businesses. Industrial Cluster Projects Promotion Office Director **Tsukamoto Yoshiaki** reviews the background to the project and examines some of its achievements thus far.

Up until the early 1990s, the focus of the regional economic and industry policies of the Ministry of Economy, Trade and Industry (METI) was on encouraging factories to relocate from major cities to provincial areas, and clustering them to bring about regional development. As the 1990s progressed, however, the strength of the yen combined with the rise of China and the ASEAN countries accelerated a process known as “*kudoka*,” literally the “hollowing out” of Japanese industry. In this process, companies relocated their factories overseas.

In response, METI introduced the “Industrial Cluster Project” in 2001. As traditional regional economic development focused on attracting enterprises was reaching its limits, METI sought to construct an environment centered on regional human networks. These networks would encourage innovation, revitalizing regional economies from within. Specifically, the scheme envisions that a broad cross-section of enterprise managers, technical experts, researchers and financiers will form human networks. The members of these networks would compete and collaborate with one another to develop industrial clusters in different regions. This would in turn help new businesses run by small and medium enterprises (SMEs) and also encourage the emergence of university-generated venture business.

Nineteen individual projects were launched across the country (see **figure**), based on criteria that included the R&D capabilities and the industrial accumulation in each region. In these projects, about 500 staff members of the regional bureaus of

METI in cooperation with private promotional bodies have formed close cooperative relationships with 5,800 SMEs and over 220 regional-university researchers, working to begin new businesses and promote the Industrial Cluster Project.

Supportive Measures

METI has a number of policies designed to provide comprehensive assistance to new local businesses and to develop industrial clusters. The budget for this assistance is 49 billion yen (441 million dollars).

Their first policy is to support close local industry-university-government networks in regions. Regional bureaus of METI act as the hub of these networks. In cooperation with private promotional bodies, they organize visits to enterprises, workshops, exchange meetings and seminars. Project coordinators also drive exchange and partnerships between businesses, universities and the government, as well as among enterprises. Consequently, enterprises, universities, research institutes, local governments and specialist trading companies form wide-area human networks.

The second policy is to support the development of technologies by taking advantage of regional strengths. This is designed to offer assistance for R&D activities within the industry-university-government joint research structure, to utilize the technological seeds and knowledge owned by universities. It also backs the entry of SMEs into new fields and the high-risk technological development of new ventures.

The third policy is concerned with bolstering the business incubator function, for example by improving facilities to cultivate entrepreneurs. Entrepreneur development facilities play an extremely important role in promoting the start-up university-generated venture business and new business development by SMEs. The establishment of such incubators affiliated with universities is being promoted. This third policy also encompasses the development of incubation managers to support the ten-

ants of the incubator facilities.

As a fourth policy, the regional bureaus of METI help develop new sales channels in collaboration with trading firms. The aim here is to support the creation of sales channels for products created from the Industrial Cluster Project, by using networks with trading companies.

Needless to say, financial support is essential for these efforts, and the final policy involves collaboration with suppliers of capital. The Industrial Cluster Support Financial Forum was established to support activities of individual projects and includes running the “Bridge Financing System” for subsidies of technology development and venture capital funds.

Track Record

Let’s take a brief look at some of the actual results of the Industrial Cluster Project over the past three years.

We start with the Regional Industry Revitalization Project in the TAMA (Technology Advanced Metropolitan Area) region. This project covers the western part of the capital, and includes the cities of Hachioji, Sayama and Sagami-hara. The Kanto Bureau of Economy, Trade and Industry and a private promotional body called the TAMA Industrial Vitalization Association Inc. have been making efforts to form a group of companies oriented toward cutting-edge product development and another group of firms focusing on basic technologies. To do this, they have partnered with 35 educational institutions and around 280 regional businesses. As a consequence of these activities, more than 40 alliances have so far been formed. Innovation has also received a boost: those enterprises that participate in the project as members successfully commercialize approximately 400 products independently each year.

The second case study is the Hokkaido Super Cluster Promotion Project. Targeting all of Hokkaido, the Hokkaido Bureau of Economy, Trade and Industry, two private promotional bodies, namely the Hokkaido IT Cluster Forum and Hokkaido Bio-Cluster Forum, 16 universities and about 300 SMEs are endeavoring to create industrial clusters in the IT and biotech sectors. In this project, 29 university-generated venture businesses have been launched and five IT firms have been listed on the stock market in the past three years.

The third example is the Bio Five-Star Company & Tissue Engineering Project. Targeting the entire Kinki region, this project has the participation of the Kansai Bureau of Economy, Trade and Industry, a private promotional body called the Kinki Bio-industry Development Organization (an incorporated nonprofit organization), 36

“A cluster is a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities.”
Michael E. Porter, *On Competition*, 1996

universities and about 220 SMEs, which are striving to put together biotech businesses. So far, 130 joint research and development activities have been carried out. The project has supported the establishment of 15 bio-ventures.

Future Challenges

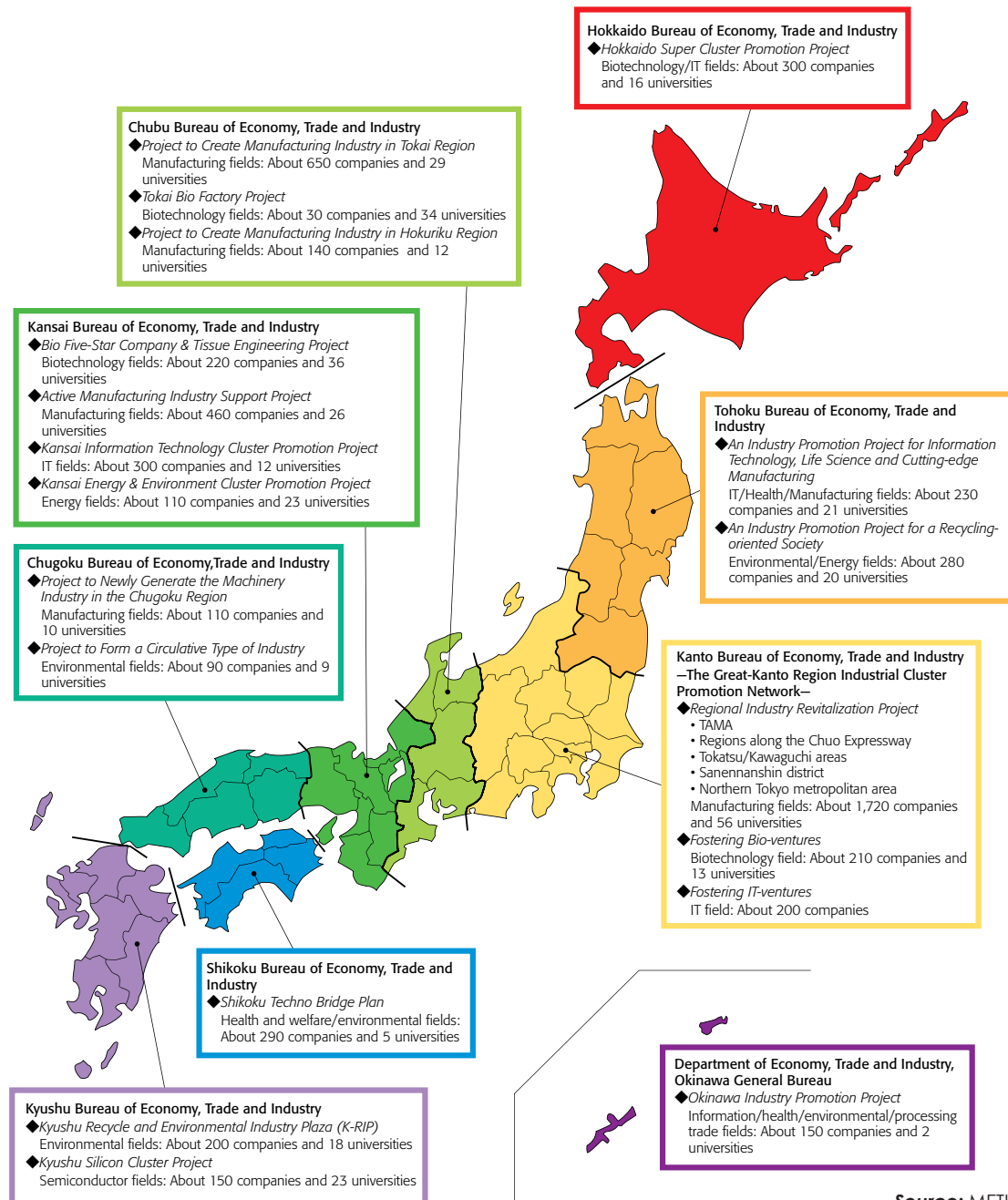
There are at least three challenges that the Industrial Cluster Project will need to address. These challenges must be overcome to ensure that the project makes a substantial contribution to the revitalization of local economies.

First, it is necessary to further expand cooperation with other ministries, including the Ministry of Education, Culture, Sports, Science and Technology (MEXT), and local public entities. This effort is already being made, but it must be strengthened further to produce better achievements.

Second, inter-cluster exchange must be promoted. Some projects have exchanges with overseas clusters. For example, the Kinki bio-business project has signed a memorandum for information exchange on regenerative medicine with Pittsburgh in the United States and Berlin in Germany. These kinds of organic collaborations with overseas clusters must be encouraged.

Third, it is essential to step up the sharing of information on successful case studies, which is helpful in the formation of industrial clusters. For this purpose, METI and MEXT will be jointly holding a nationwide cluster forum in September this year. At the forum, all those involved in different clusters around the country will be invited to gather and exchange information. This represents an attempt to advance

The Industrial Cluster Project (19 projects)



Source: METI

information sharing and accumulation.

Sustained and consistent effort will be needed if Japan's cluster projects are to take root, bearing in mind that they were launched only a relatively short time ago.

Not all projects have made good progress over the first three years, but it seems certain that continued efforts to create industrial clusters over the next decade or two will lead to the revitalization of regional Japan and to the revival of the en-

tire country. □

Note: Beginning next month our Clusters series will focus on the activities and achievements of specific clusters nationwide.

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