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Kitakyushu Asian Smart Industry City

— Kitakyushu City, Fukuoka Prefecture, Japan
2010-

Aiming for industrial expansion in Asia through the establishment of an environmental business model based on experience and knowledge of overcoming pollution

Key Issue

Since the period of high economic growth in the 1960s, anti-pollution measures and shift of industrial structure from heavy industry to new industries, which would enable harmonious balance with the environment, had been critical themes of the city of Kitakyushu where a lot of heavy industries agglomerated. It was required for the city to accumulate its experience and know-how in overcoming pollution such as air and water pollution achieved over many years, as environmental technologies that could be deployed both in Japan and overseas, while utilizing them to develop new infrastructure for local industries.

Project Approach

Investing in projects which will develop regional resources

The city has implemented experimental and demonstrative projects focusing on resolving local issues (e.g. those concerning energy, resources, etc.) while utilizing local resources (including experience, technology and human resources). Thus Kitakyushu was successful in applying environmental technologies and know-how accumulated in the region to business model structures and proposals in new fields of energy circulation and recycling.

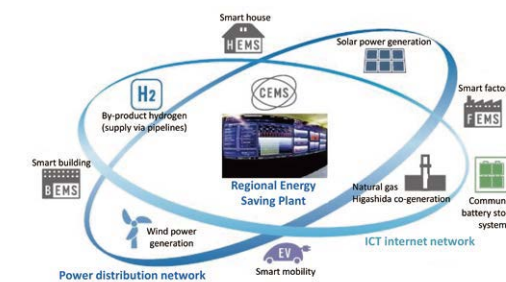
Exporting accumulated technologies, know-how and infrastructure as a package to overseas countries

The Kitakyushu Asian Center for Low Carbon Society took a central role in the export of environmental technologies and know-how in areas such as energy saving and conservation of resources as comprehensive urban solutions. The city has shifted from a conventional resource-based industrial city to a smart industrial city that develops and proposes environmental technologies, and is exporting environmental technologies that will help the promotion of low-carbon society in Asia.

Bird's-eye view of Kitakyushu Eco Town [Comprehensive Environmental Industrial Complex and Hibiki Recycling Area]
Source: JIJI
[Kitakyushu Eco Town Project]
This project aims to utilize all types of industrial waste as raw materials in other industrial fields, with the ultimate goal of achieving zero emission of industrial waste and creating a resource-recycling society. Through the collaboration of universities, research institutions and private-sector companies, the project has implemented environmental-industrial promotion initiatives ranging from basic research to the development and commercialization of new technologies.

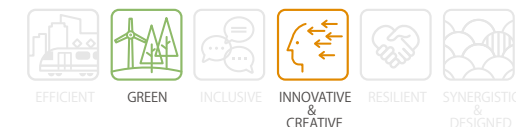
[Kitakyushu Smart Community Creation Project]
In this demonstrative project, an energy management system has been established with the participation of both residential and industrial consumers, with the aim of achieving smart, total, waste-free use of energy in the local community. The smart community is now beginning to expand, with the prospect of covering the entire city area.
Source: Kitakyushu City

Overall image of Kitakyushu Smart Community



Data

[Kitakyushu Smart Community Creation Project]
Area: 120ha (Higashida district, Yahatahigashi Ward)
Project implementing bodies: Kitakyushu Smart Community Creation Council (77 organizations including Kitakyushu City Government, private-sector companies, universities and research institutions)
Main facilities introduced: Power generation facilities (wind power, mega solar and binary power generation), regional power storage systems, CEMS (Community Energy Management System), BEMS (Building Energy Management System), HEMS (Home Energy Management System), FEMS (Factory Energy Management System), etc.
[Kitakyushu Eco Town Project]
Area: Demonstrative research area: 16.5ha, Total environmental complex: 25ha (of which recycling zone 6ha)
Project implementing bodies: Kitakyushu City Government and 25 private-sector companies
Main facilities introduced: university and company research centers, recycling and reuse plants, training facilities, etc.



To the Next Phase

The city of Kitakyushu, which successfully overcame local issues, has also developed a number of initiatives in parallel. These achievements have helped to foster a sense of civic pride, and contributed to establishing and developing smart industries as a new culture of the city.