

From the Developmental to Entrepreneurial State and Beyond? - Multi-level Governance of Mission-Oriented Regional Policy in Japan

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The Entrepreneurial State and Mission-Oriented Innovation Policy: Effects on Regions and Implications for Regional Policy

- *The Entrepreneurial State*
 - *The Developmental State versus Entrepreneurial State*
 - the Convergence of the State models - *what does it mean at the local/regional level? New models?*
 - the importance of the 'local developmental state' – the 'local entrepreneurial state'?
- *Mission-Oriented Innovation Policy*
 - the Developmentalist approach – e.g. the role of agencies in transformative change
 - steering STI and industrial innovation towards more socio-economic goals and tackling societal challenges (e.g. aging, quality of life, sustainable development)
 - *Mission-oriented innovation policy helping local innovation and entrepreneurial ecosystems?*
- *Regional innovation policy*
 - governance changes and a variety of institutional and policy capacity
 - policy interactions between the *levels*
 - *How do regional innovation policy facilitate innovation and how do missions help innovation in the region ?*

The changing nature of the State and policy interactions between the levels and missions

- Which local State model works best to achieve specific national and local innovation missions?
- In what ways does the national and sub-national mission-oriented innovation policy facilitate collective actions of innovators and entrepreneurs and diverse stakeholders in local ecosystems?
- In what ways is local/regional mission-oriented innovation policy governed in the entrepreneurial developmental state?

The RQs and a conceptual approach in this paper

How does the local and regional policy reflect the changing nature of the State and policy interactions between the levels and missions?

Who are driving the narratives at the local/regional level?

How has the region built up “orchestration” capacity between levels and missions?

- The term “orchestration” describes collaborative practices for the development, management and coordination of innovation networks without hierarchical authority (Dhanaraj & Parkhe, 2006; Gulati et al., 2000).
- the orchestrators’ process of “delegating and transferring power and responsibility to actors in the network”(Thomas et al, 2020).

Japanese State models moving towards the 'entrepreneurial developmental state'

- a 'late-comer' to industrialisation – the Developmental state orientation (Johnson, 1982)
- Distinctive configuration of innovation-led development (Aoki, 1988) with governments (both national and local) playing 'developmental state' roles (Edington, 1999)
- the investment in R&D led to the national technological innovation underlined by its National Innovation System (Freeman, 1995; Goto, 2000)
- The 'revitalization of local economies' (2014-) with a focus on building local infrastructures for 'start-up ecosystems' (2019 -), 'J-Start-up' – coordinated by the central government
- the rise of an 'entrepreneurial developmental state' – the Entrepreneurial state orientation with large incumbent firms/start-ups (Klingler-Vidra & Pacheco Pardo, 2022).

Evolution of mission-oriented innovation policies (MOIP) in Japan at national level – *policy legitimization and developmentalist governance* (Karo, 2018)

- the need to fill the technology gap between Japan and other developed countries; MITI/METI as ‘developmental’ pivotal role with other agencies (Hill and Fujita, 2000)
- The 1980s -Japan’s industrial policy, defined as the “custom design of policy instruments to fit the different priorities, needs and circumstances of individual industries” (Okimoto, 1989)
- The 1990s -Focus on basic science and ‘science-industry’ relationship
- The mid-2000s - a shift toward policy rhetoric emphasizing societal challenges—aging societies, environment issues (Karo, 2018); Abenomics and “the Innovation 25” (2007)
- But allocates a lower share of Government R&D budgets to projects and activities that are related to health and societal issues (OECD 2021).

Multi-level governance of regional (& local) policy

- Developmental state's strategic organisation - Central, prefectural and local governments engage in multilevel planning and co-ordination (Hill and Fujita, 2000)
- Centrally based 'top-down' planning and 'techno-nationalism'; and
- *the importance of the 'local developmental state' in Japan.....proactive local and regional governments have been shown to play significant roles in the creation of Japanese style industrial production systems (Edgington, 1999).*
- Since mid-1990s, transferring authority to prefectural and municipal governments on matters of industrial and employment policies (Ito and Yugami, 2005); the Devolution of Power Law (1999)
- Regional governance in STI policy in 2000s with cluster initiatives and science-industry relationships (Kitagawa, 2007)
- Governance by network; territorial adaptability - "heterogeneous and varied nature" of local governments (Okamuro et al., 2019) in terms of their capacity, resources, and decision-making powers on SME support
- "Regional Revitalization" (2014~); "Start-up Ecosystem Hub Cities Initiative" (2019~)

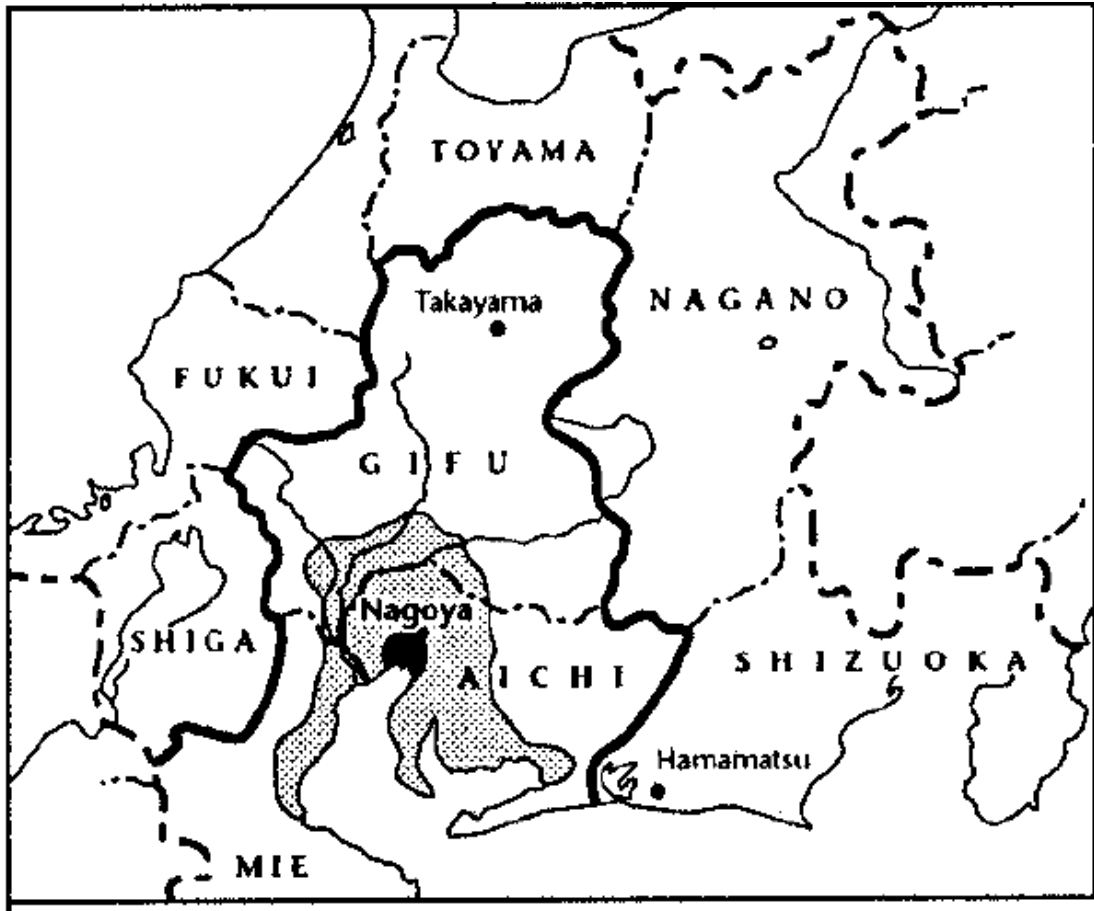
- How does the local and regional policy reflect the changing nature of the State and policy interactions between the levels and missions?

- Who are driving the narratives?

- How does the region build up “Orchestration” capacity between levels and missions?

- Descriptive and illustrative case studies of two city-regions for discussion
- Documentary/secondary data and policy analysis of the evolution of two *industrial city-regions* in Japan – mostly 1980s onwards (but some business history reference dates back to 1900s)
- Some limited number of interviews with the city government and public intermediary organisation, to get the contemporary contexts but mostly relies on secondary data

The evolution of the Chukyo industrial region in Japan

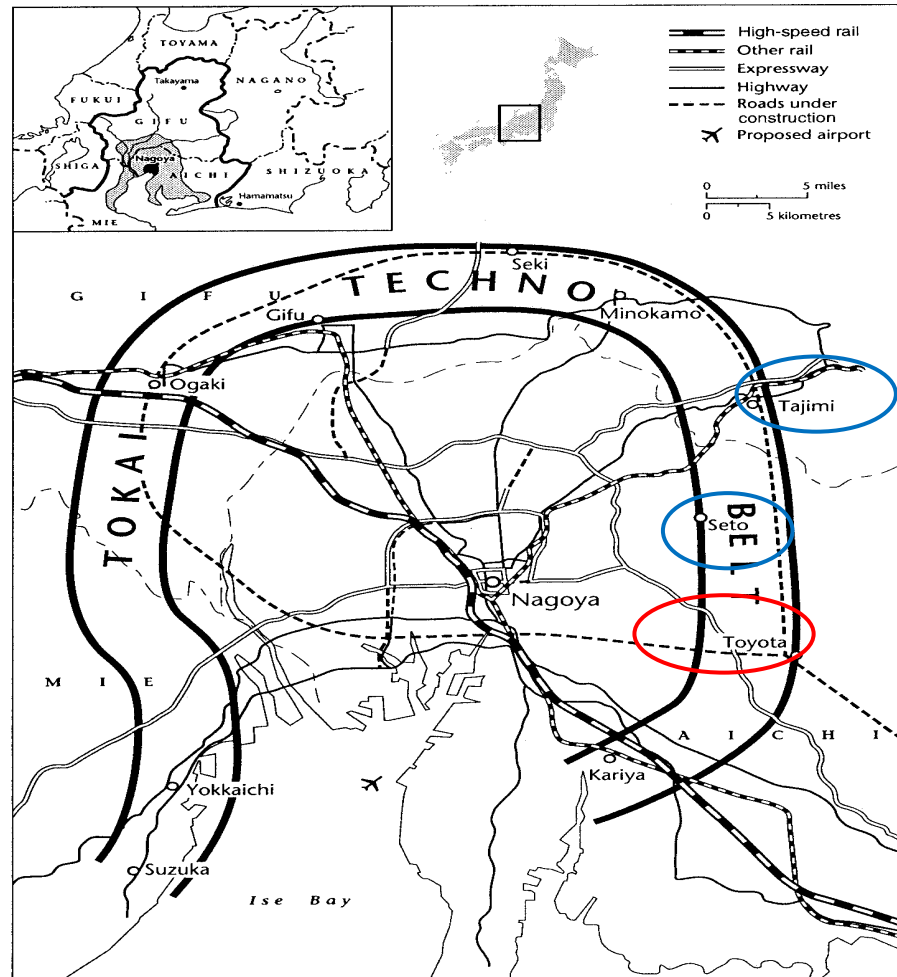


- A long-standing industrial region
- “proactive local and regional Governments”
- “the increasing role of local networks of firms and industries and their impact upon regional innovation” with the “state intervention” in the 1990s

Source: Edgington, 1999

History matters... a “window of locational opportunity” (Storper and Walker, 1989,p. 75)

- Toyota Automatic Loom Company in the 1930s (and its spin-off company Toyota Motors)
- Due to the fame and economic importance of its major employer, the city of Koromo changed its name to Toyota on January 1, 1959.
- Ceramic towns of Seto and Tajimi – NGK (1919); INAX (1934) - diversified into advanced ceramics, semi-conductor, environmental equipment and satellite technologies



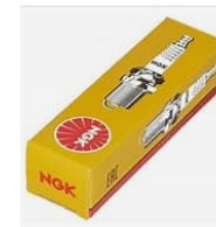
Source: Edgington, 1999



TMHE's Toyota History – The World's First Automatic Loom M... | Flickr



The 1936 Toyota AA, the first vehicle produced by the company while it was still a department of Toyota Industries



NGK - Spark Plug BR6HS



The National-Regional governance layer – the Chubu region



Since 2001
Cluster policy 2001-2019



The Chubu Bureau of Economy, Trade and Industry carries out the following measures to support local companies:

- Providing information on CASE, MaaS, and the latest technological development trends
- Building a support system in collaboration with local support organizations
- Helping improve planning and proposal skills through strategy formulation
- Providing support for capital investment and technological development

In addition, as the global market for MaaS-related businesses is expected to grow rapidly in the coming years, we support MaaS demonstration experiments in the Chubu region and carry out activities to raise public awareness by holding symposiums, with the aim of creating new value from the perspective of mobility

https://www.chubu.meti.go.jp/english/2023_index.html



**J-Startup
CENTRAL**

Local government initiatives – Aichi Prefecture



[Home](#) [Challenge 1](#) [Challenge 2](#) [Challenge 3](#) [Past Challenge](#) [Terms & Conditions](#) [FAQ](#)



Challenge 1

Toyota Industries Corporation

Industrial Development in Aichi
Prefecture through Digital Transformation
- Solving Social Issues through the Use of Autonomous Mobile
Robot "AiR" -

Challenge 2

Handa City

Co-creation of a sustainable municipal policy model
by diverse players for a declining population
- Co-creation of a sustainable municipal management model in a
society with a declining population -

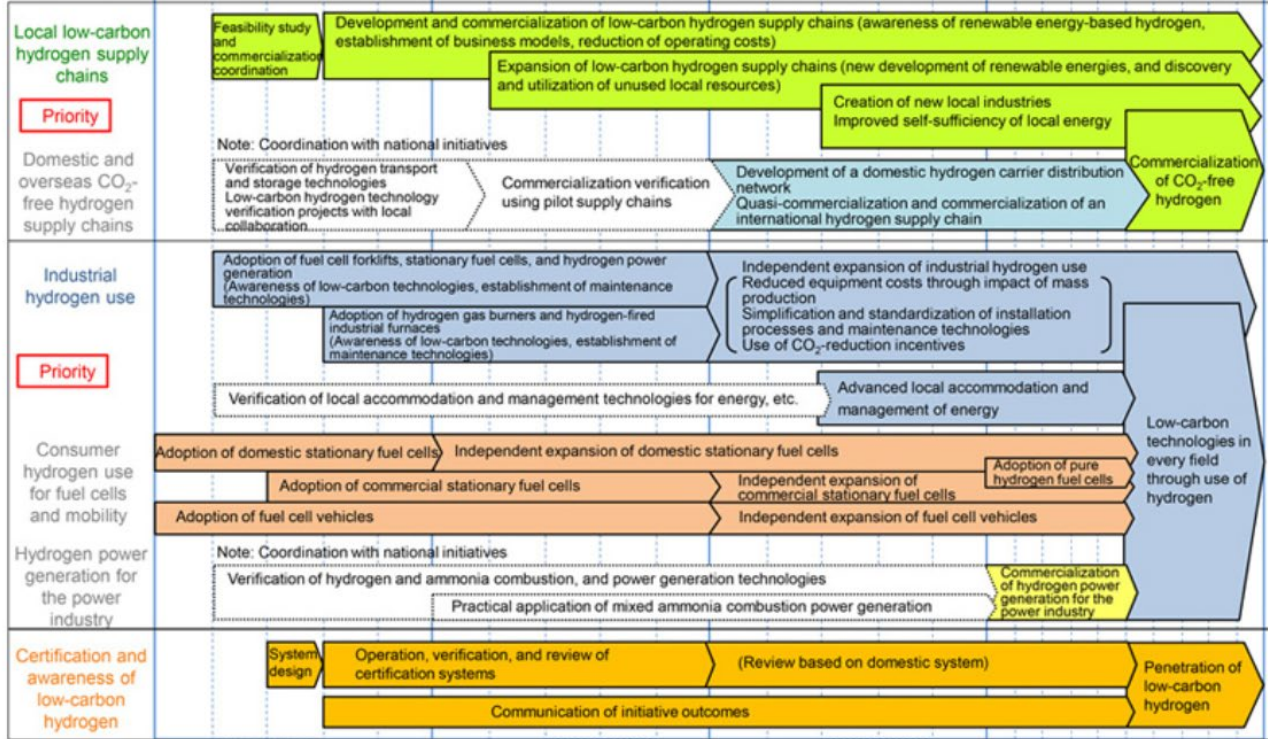
Challenge 3

NGK Spark Plug Co., LTD.

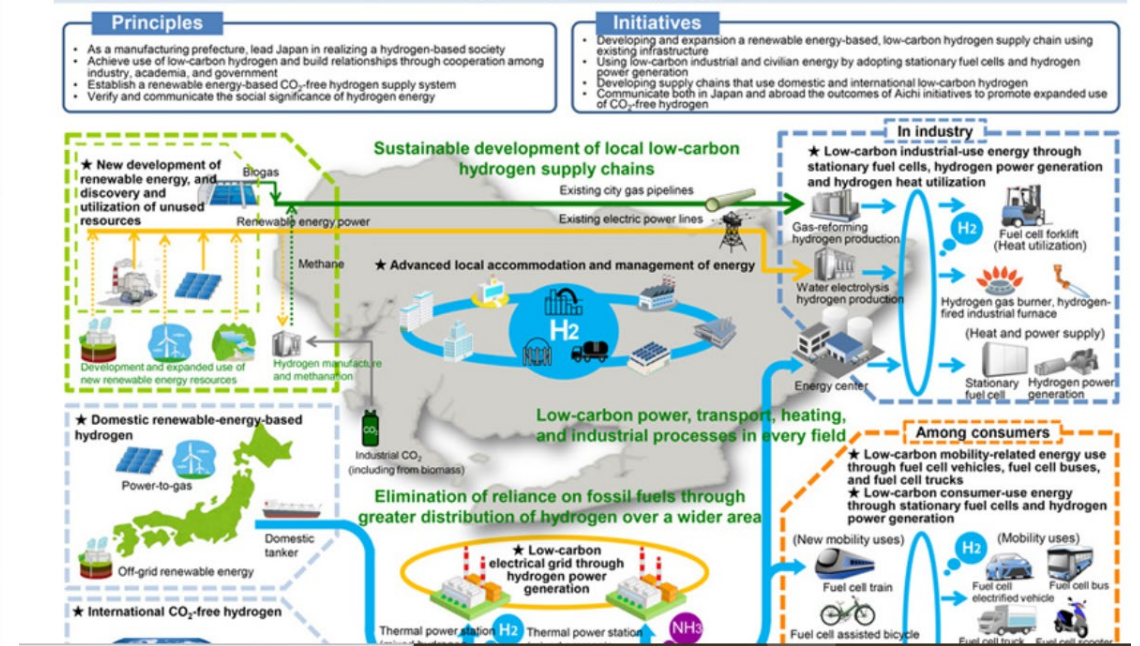
Creating a community where everyone can thrive throughout their lives with high levels of well-being.

- Optimizing the detection of and the support for young caregivers through IT to improve the well-being of Aichi Prefecture's residents-

Aichi Prefecture initiatives



Aichi Low-carbon Hydrogen Supply Chain 2030 Vision



The evolution of the Kitakyushu City in Japan

- A long-standing manufacturing region originally with government driven Steel industry (1901~)
- Major iron and steel industry through industrialization with severe environmental degradation
- Population shrinkage and the “Green growth strategies”



From “Grey City” to “Green City” Overcoming Severe Environmental Pollution



Severe Air Pollution
In 1950s & 1960s



Present



Residents
enjoying blue sky



“Dokai Bay, Sea of Death”



Recovered Blue Skies and Sea,
people enjoying the clean environment



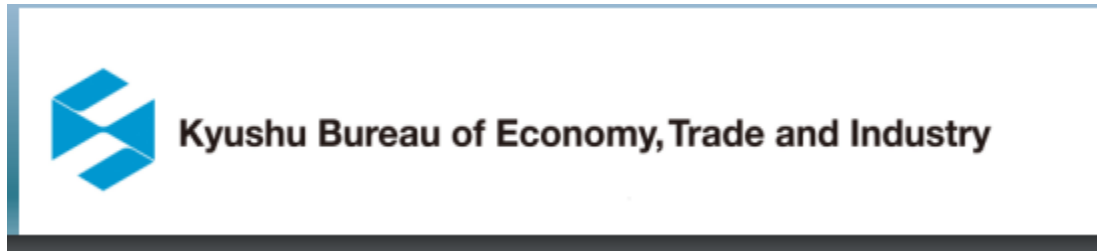
Swimming at
Dokai Bay

Re-industrialization and diversification process

- In 1961, Yaskawa Electric opened its industrial electronics division in Kokura City.
- In 1975, Nissan opened a plant near Kitakyushu, in Kanda-Machi.
- The presence of steel manufacturers, and derived expertise, helped to underpin these new activities in Kitakyushu City (Ortiz-Moya, 2018).
- Many companies that used to serve steelmaking adapted to also supply the newcomers and diversified their markets (Feldman, 2008).

The National-Regional governance layer

- METI Kyushu Bureau



Kitakyushu City support for investment in Japan

Fields for further integration
IoT industry, environment and energy industries, etc.

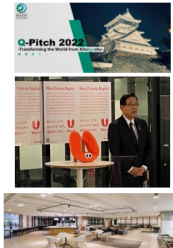
Kitakyushu promotion support systems

KTI Center
(Kitakyushu Trade & Investment Center)
Collaborative support by Kitakyushu City and JETRO

Start-up visas
(National strategic special zone)
City support for visa applications and procedures

COMPASS Kokura
Provision of small offices and co-working spaces

Provision of acceleration programs



Progress in recent years

Approximately 50 companies
Establishment of a wide variety of business locations including businesses in the service industry, manufacturing industry, and a wide range of other industries.

Kitakyushu City strengths

- Concentration of manufacturing businesses including steel industry, automotive industry, robot industry, and other industry businesses.
- Support for research and development projects at Kitakyushu Science and Research Park and for open innovation with local businesses
- Selected by the Cabinet Office as a "Startup Ecosystem Base City" in 2020.
- The city was the first city in Asia selected by OECD as a "Global model city for promotion of SDGs" in 2018. In addition to a concentration of recycling industry businesses, centering around the Eco-town Project, the city also aims to become a comprehensive stronghold for wind power generation related businesses.

Inquiries

Kitakyushu City Startup Promotion Section
(International Business Supervisor)

Measure development of Kyushu

Industrial Strategy for Kyushu-Okinawa Regional Growth—Kyushu-Okinawa Earth Strategy II

The Kyushu-Okinawa Regional Council for Industrial Competitiveness promotes initiatives in four strategic areas that leverage Kyushu and Okinawa's strengths to achieve the sustainable development of Kyushu, a gateway to Asia trying its best to work on solving new issues. The Council developed this strategy in 2014 under a public-private partnership. As of 2021, 21 projects are underway on Stage 2, incorporating new perspectives.

Strategic Areas

- Clean Energy & Environment
- Medical, Healthcare, and Cosmetics
- Agriculture, Forestry, Fisheries, and Food
- Sightseeing Tourism

Cross-cutting Initiatives

- SDGs
- Founding and Venture Businesses
- Advanced Technologies and Drones
- Diversity Management
- Global Human Resources

Four Common Perspectives

- SDGs
- Advanced Technologies
- Work-style reform
- After Corona

21 projects promoted under the Kyushu-Okinawa Earth Strategy II

Clean	Project on Realizing Quality Hydrogen Energy Society
	Project on Promoting Industrial Base Formation for Geothermal and Hot Spring Heat Energy
	Project on Establishing Base Formation for Marine Renewable Energy Industry
	Project on Promoting Base Formation for Northern Kyushu Automotive Industry
Medical, Healthcare, and Cosmetics	Project on Establishing Base for Organic Protonics and Electronics Industry
	Project on Promoting Industrial Base Formation for Kyushu and Asia Environmental Energy Industry
	Project on Promoting Healthcare Industry
	Project on Creating Innovative Medical Products
Agriculture, Forestry, Fisheries, and Food	Project on Promoting Biotechnology Industry
	Project on Promoting Karatsu Cosmetics Initiative
	Project on Promoting Kyushu Food Exports
	Project on Promoting Smart Agriculture
Sightseeing	Project on Promoting Small Fisheries Industry
	Project on Promoting Innovation from Agricultural, Mountain, and Forest Areas
	Project for Kyushu Tourism Strategy
	Project on Promoting Kyushu SDGs Management
Advanced Technologies and Drones	Project on Promoting Founding and Venture Businesses
	Project on Promoting Advanced Technology Utilization
	Project on Promoting Drone Industry
	Project on Promoting Use of Lightweight Rully for Embedded Software in Manufacturing
Global Human Resources	Project on Promoting Development and Utilization of Global Human Resources

Kitakyushu City's Green branding and International strategies

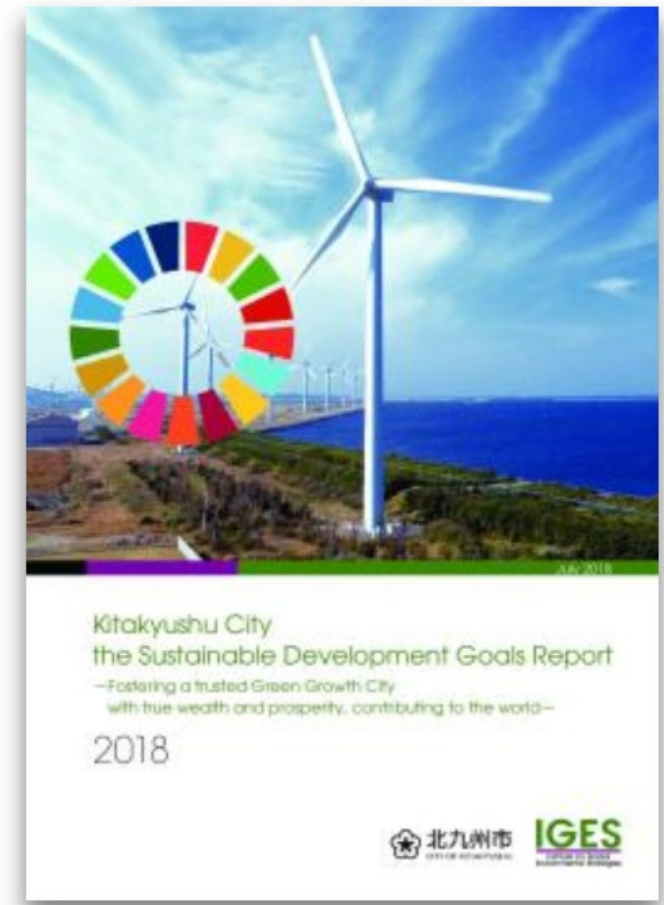
- 2008 the EcoModel City;
 - 2010 the Smart Community Project;
 - 2011 the FutureCity Initiative; and
 - 2011 the Green Asia International Strategic Comprehensive Special Zone.
-
- Kitakyushu City initiated the Green Frontier Plan to halve its greenhouse gases by 2050, focusing on developing clean energies, and creating a model that could be replicated in other Asian cities (Eco-Model City Project, 2014).
-
- (a) continue advancing Kitakyushu's green brand; (b) test new mechanisms to better prepare cities to face future environmental challenges, specifically, global warming; and (c) create an international collaboration network of Asian cities based on environmental principles. (Ortiz-Moya, 2018).



**City-to-City International
Environmental Cooperation
Network in Asia**

From manufacturing to Green revitalization

“Kitakyushu City has interlinked its manufacturing know-how with its knowledge on pollution abatement and adapted it to fulfill new market needs, seeking to improve its local economy. At the same time, it has reinforced the partnerships that developed between grassroots movements, local authorities, and private companies to establish a more inclusive regeneration model. Its green revitalization model combines top-down and bottom-up initiatives.”
(Ortiz-Moya, 2018)



From the “Industry world” to “Market world” to the “Mission world”?

- Developmentalist legacy with the Entrepreneurial State applied at the local level;
- Layers of governance structures and the State interventions

- Series of “a window of locational opportunity” (Storper and Walker, 1989,p. 75)
- Semi-vertical networks and product systems (Izushi 1997) combined with diversification process (Feldman, 2008)

- Orchestration of innovation at the Prefectural and City level
- local governance by networks and territorial adaptability (Okamuro et al 2018)
- New emerging mission-driven market opportunities and interactions among socio-economic actors at multiple levels.

Thank you