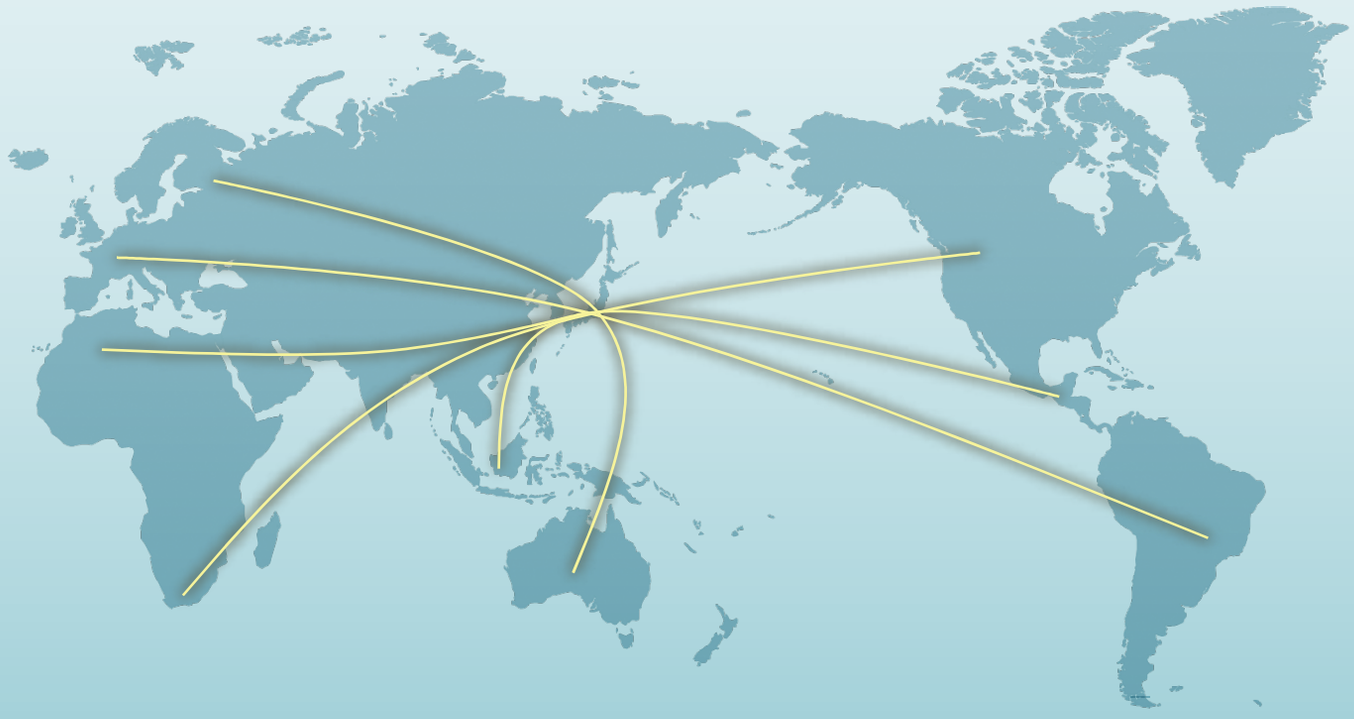
"FutureCity" Initiative



Cabinet Secretariat
Government of JAPAN

Contents

Outline of the “FutureCity” Initiative

1. Purpose

The purpose of the "FutureCity" Initiative is to select a limited number of cities to create world-leading successful cases in terms of expanded demand, job creation, and resolution of international issues. In doing so, the initiative strives to resolve common issues for the 21st century related to the environment and aging, and to disseminate such model solutions both within and outside Japan.

2. Outline

The basic concept of the Initiative is to realize “human-centered cities while creating new values to resolve the challenges of the environment and super aging.” It aims to realize cities where “everybody wants to live” and “everyone has vitality” and where the values of the environment, society and economy are innovatively created.

Selected cities will take action to realize a future vision by addressing the environment and super aging society as fundamental issues, and also by considering other issues unique to the local community.

A platform for international knowledge will be created to promote international coordination to drive the initiative and to create a model for sustainable creation and autonomous development of values.

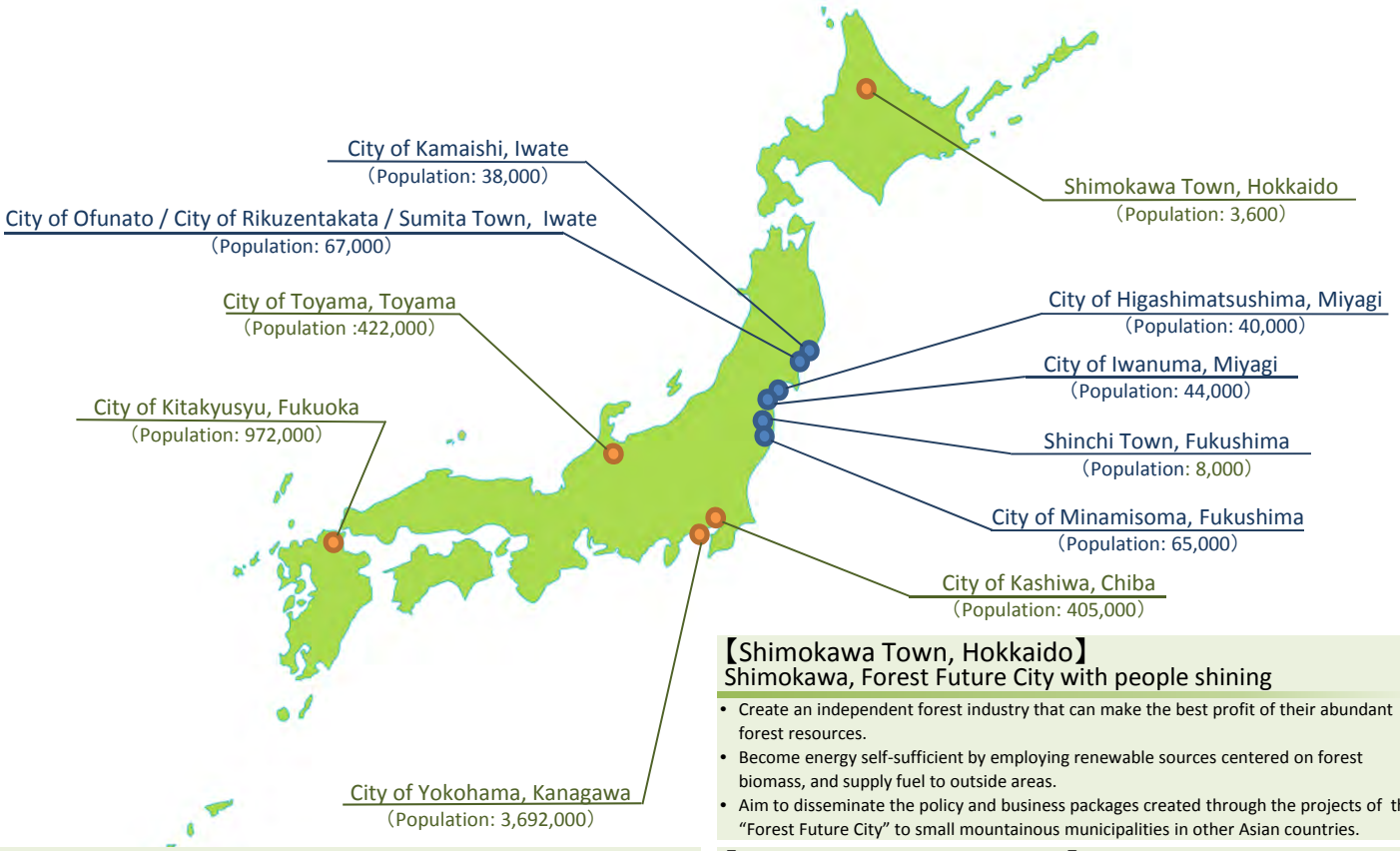
3. Milestones

February 2011	Concept study of the “FutureCity” Initiative (Oct 2010 – Feb 2011) Expert Study-Group for the “FutureCity” Initiative (Chairman: Shuzo Murakami, President, Building Research Institute)
December 2011	Selection of model cities of the “FutureCity” Initiative (11 cities/towns including 6 from disaster affected areas)
February 2012	The 1st International Forum on the “FutureCity” Initiative (in Tokyo)
May 2012	FutureCity Plans (5-Year) compiled by each city
July 2012	Rio+20 (United Nations Conference on Sustainable Development) Held an official side event on the “FutureCity” Initiative
October 2012	Information Exchange Meeting of Cities

▲The 1st International Forum on the “FutureCity” Initiative

▲Information Exchange Meeting of Cities

"FutureCity": Cities selected in 2011



【Shimokawa Town, Hokkaido】 Shimokawa, Forest Future City with people shining

- Create an independent forest industry that can make the best profit of their abundant forest resources.
- Become energy self-sufficient by employing renewable sources centered on forest biomass, and supply fuel to outside areas.
- Aim to disseminate the policy and business packages created through the projects of the "Forest Future City" to small mountainous municipalities in other Asian countries.

【City of Kashiwa, Chiba】 Kashiwanoha Campus City Project

"Autonomous urban management with partnership among public, private and academia"

- Leverage leading-edge knowledge that is possessed by universities and other research institutes
- Conversion to a smart city upgrading the regional energy management system
- Hire retired people as health supporters
- Support ventures by establishing and utilizing a Gap Fund that fills the gap between the university's fundamental research and business

【City of Yokohama, Kanagawa】 OPEN YOKOHAMA

-Creative Port City where People, Things and Events Connect and Develop-

- Leverage citizen's power of the city's population of 3.7million, the historical background of the first port opening the country to the world, and accumulated knowledge on the environment and energy
- Promote the Yokohama Smart City Project (YSCP)
- Enhance mutual assistance of people in the local community by encouraging activities of NPO and other network, introduce life support function for the elderly to the houses and renovate and revitalize big size housing complex

【City of Toyama, Toyama】 Construction of Toyama style urban management with compact city strategy

-Towards sustainable and value creating city filled with social capital-

- Promote a compact city using public transportation centering on LRT
- Formation of the community rich interaction between people with various exchanges between generations
- Industrial development that utilize renewable energy and characteristics by an accumulation of Pharmaceutical industry

【City of Kitakyushu, Fukuoka】 Kitakyushu FutureCity

- Leverage the experiences of overcoming pollution and global environmental cooperation, manufacturing technologies and achievement of tackling the issues of aging
- Overseas deployment of urban environmental infrastructure and international water business deployment in collaboration with the public and private-sectors.
- Maintain and Promote health level of citizens by local cooperation and citizen-centered wellness promotion
- Support the reconstruction efforts in Kamaishi City, by utilizing the achievements of the smart community creation project

- Areas affected by the Great East Japan Earthquake -

【City of Ofunato, City of Rikuzentakata, Sumita Town, Iwate】 Kesen Regional FutureCity

- Such as the establishment of a distributed storage facilities incidental mega solar power plants,building a society that produces its own energy in the region, a stable power supply
- Promotion of elderly-friendly town planning integrated urban functions necessary for life.
- Promotion of new industries by attracting energy-related companies and promotion of agriculture, forestry and fisheries industries of the use of advanced technologies.

【City of Kamaishi, Iwate】 Kamaishi FutureCity Initiative

- Realize a "Kamaishi Recycling Society with a low-carbon (LC) , energy saving, and resource saving" by encouraging local energy production for local energy consumption as well as by creating industries utilizing various types of energy
- Realize a "Kamaishi Industrial Welfare City" by creating community where elderly people are motivated to live activity

【City of Iwanuma, Miyagi】 Reconstruction with Love and Hope

- Create harmony with nature by creating a "Hill of Thousand-Year Hope" using rubble from the disaster
- Promote a smart grid plan based on mega-solar businesses
- Utilize cloud technology to promote health management and cooperation among medical organizations, and establish base for advanced medical technology

【City of Higashimatsushima, Miyagi】 Reconstruction from the Great East Japan Earthquake

- Renewal of Higashimatsushima, Towards the future together without forgetting that day -

- Aim to achieve sustainable growth while realizing a safe and secure city
- Implement independently distributed power generation system with renewable energy, promote low-carbon building and EV
- Promote healthy housing by utilizing the CASBEE health checklist

【City of Minamisoma, Fukushima】 Recycle City connecting to the next generation, Minamisoma

- Realize an "energy cycle" by introducing renewable energy massively and by shifting to smart-grid based energy consumption
- Realize a "generation cycle" where several generations reside together in apartment complexes and co-housing
- Realize an "industry cycle" with independent processing/distribution routes with focus on the primary industry

【Shinchi Town, Fukushima】 "Of cource, Shinchi is the best town"

-Town where you can see the future and hope of environment and life-

- Build a "smart hybrid network" consisting of various energy sources by making full use of geographical characteristics
- Create new industries related to different forms of renewable energy
- Build a local mobility system that responds to the super-aging society
- Provide various regional information systems to contribute to higher QOL of the elderly

Concept of the "FutureCity" Initiative

1. Background of the Initiative

Urban populations have increased sharply and now comprise half of the world's population. This is projected to grow to around 6.4 billion — 70 % of the world's population by 2050. This rapid urbanization is seen prominently in developing regions such as Asia and Africa and has caused various environmental and urban problems. The 21st century is referred to as the age of the city. In this age, the challenge of realizing an affluent life without increasing the burden on the urban environment is a challenge common to all human-beings — a challenge based on an urban perspective.

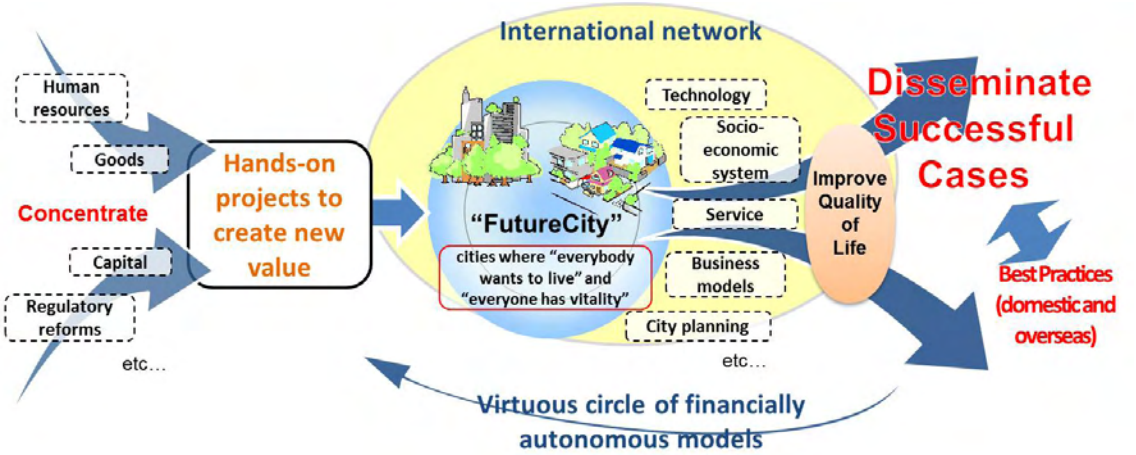
Japan is known as a "forerunner in addressing global challenges" such as those of both a rapidly decreasing birthrate and rapid aging. It is projected that in 2050 seniors over age 65 will comprise 40% of the population. Realizing cities and regions where senior citizens can live a fruitful, healthy and secure life in a society is an imminent challenge. In the near future, many countries, starting in Asia, are expected to experience this challenge. Therefore, Japan is in a position to first tackle this problem and to offer solutions to these common human challenges.

In this context, it is extremely important to mutually recognize the problems, to pose the problems in a general way, and to think about the framework for solutions to such common human challenges as the environment, aging and revitalization of societies and economies.

The Government of Japan identified the "FutureCity" Initiative (hereinafter "Initiative") as one of the National Strategic Projects in its "New Growth Strategy" in June 2010. The objective of this initiative is to challenge common human problems and to try to propose model solutions as a forerunner.

2. Purpose of the Initiative

The purpose of the Initiative is to select several cities as "future cities," to realize world-leading successful cases in terms of technology, socioeconomic systems, services, business models and city building in order to resolve common 21st century human issues such as the environment and aging, and to disseminate them not only within Japan but also to the world. The ultimate goal is to achieve a lively and sustainable



society with a new socioeconomic system.

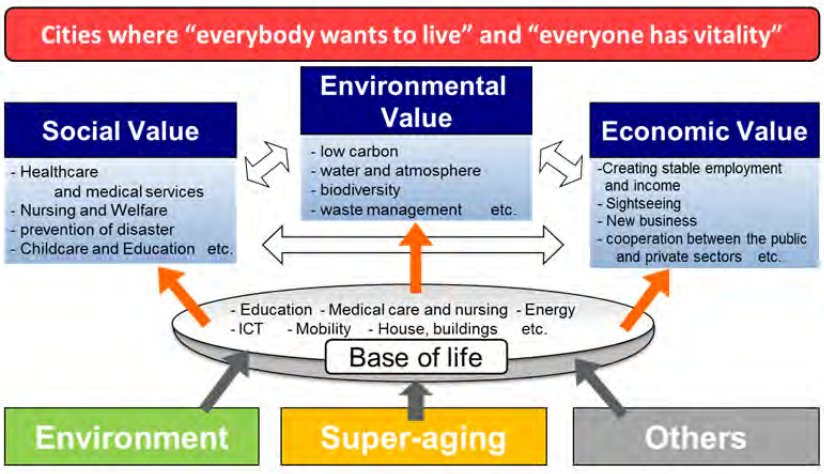
The selected cities are expected to lead to innovations in socioeconomic systems that can create successful cases. The Japanese government will support the selected cities by concentrating related budget appropriations on them, effecting deregulation and reforming the legal and tax systems.

To realize the Initiative, it is important to adopt an open-source innovation strategy which is open both at home and abroad. This strategy is aimed at sharing various experiences, developing intellectual networks, and disseminating the successful cases both inside and outside Japan, at the each development stage in creating concepts, planning and developing technologies and systems and realizing them.

3. Basic concept of the Initiative

The basic concept of the Initiative is to achieve “human-centered cities creating new value while tackling the environmental issues and aging.” In so doing, it is also important to establish sustainable socioeconomic systems and recover social solidarity. Through projects improving the quality of life, the Initiative aims to build cities where “everybody wants to live” and “everyone has vitality” and where the value of environment, society and economy is innovatively created.

To realize a sustainable society, considering the value of the environment, society and economy is essential. The “FutureCity” where “everyone wants to live” and “everyone has vitality” is defined as a city where the value of the environment, society and economy is innovatively created, based on the premise that a minimum level of value in each of these three areas has been satisfied.



4. Future vision and Efforts of individual cities of the “FutureCity” Initiative

The selected cities are to set the strategic future vision in accordance with the abovementioned basic concept in ways that will maximize the total of environmental, social and economic value. When setting the future vision, it is important to adopt both a “backcasting” approach of looking back from the targeted future ideal and a “forecasting” approach of looking forward from the present situation to enhance feasibility. Moreover, it is important to set the vision in a way to maximize city’s attractions, showing their variety and originality as well as their unique natural and social resources.

The selected cities have to tackle challenges of the environment and aging as a minimum requirement and then can take on such additional challenges as increasing

their originality and comparative advantages. The selected cities are expected to tackle challenges in cooperation with other cities both inside and outside Japan. It is important to gather worldwide wisdom by absorbing other cites' successful cases all over the world, to integrate various efforts in different areas to realize synergistic effect, with the goal of socioeconomic systems where value is created continuously. This process should be more than just a real-world experiment and should lead to real innovations. By creating successful cases continuously and outgrowing subsidy dependence, the cities are expected to acquire a self-financing independence and establish financially autonomous models applicable both inside and outside Japan.

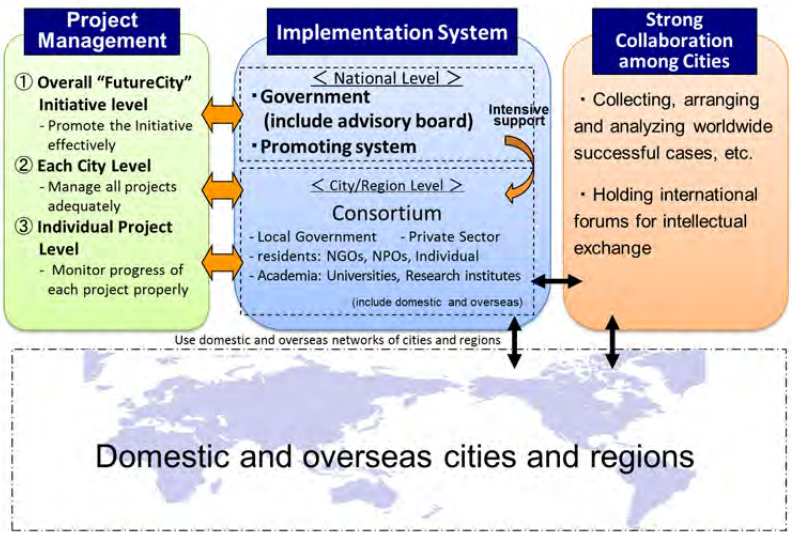
5. A Framework to promote the Initiative

Three important elements are necessary to make the Initiative a success; implementation of steady project management, establishment of a powerful and speedy implementation system, and strong collaboration among cities.

In the Initiative, three areas of project management are crucial: how to promote the Initiative effectively, how to manage all projects in individual cities adequately, and how to monitor progress of each project properly. Steady project management employing the PDCA cycle in each of these areas will increase the possibility of success.

It is essential to have a powerful and speedy implementation system to create successful cases and disseminate them both inside and outside Japan. The national government will not only give advice to the cities but also establish a promoting system to coordinate financing, deregulation and various reforms. The selected cities will form a consortium with corporations, universities and local governments.

Improving upon successful cases and speeding up dissemination will be realized by strengthening cooperation among cities. The national government needs to construct an international intellectual platform by collecting, arranging and analyzing worldwide successful cases, disseminating them, and holding international forums for intellectual exchange. To this end, the selected cities are expected to exchange their own successful cases with other cities both within and outside Japan by utilizing the abovementioned platform as well as deepening cooperation with those cities continuously, including the exchange of citizens.



Promotion Council for the “FutureCity” Initiative

1. Purpose

The purpose of the Promotion Council for the “FutureCity” Initiative is to create successful cases that resolve issues related to the environment and a super-aging population, both of which are issues common to humankind in the 21st century. The initiative aims to disseminate such cases nationwide to promote the development of a sustainable economic society, and also to transmit our country’s excellent approaches to the world.

2. Members

Members of the Promotion Council are “FutureCities,” Eco-Model Cities, and other municipalities and private bodies, etc., all of which are motivated to develop cities and regions that respond to environmental and super-aging issues.

[Chairperson: Kenji Kitahashi, mayor of Kitakushu City]

-Participating Bodies-
(As of November 14, 2012)

-Municipality:	110
-Others:	118
Total:	228

3. History

December 14, 2008: Foundation
The Promotion Council for Low Carbon Cities was established by motivated municipalities, etc., with the aim of disseminating the approaches taken by the Eco-Model Cities.

May 29, 2012: Reorganization
The Council was expansively reorganized to become the Promotion Council for the “FutureCity” Initiative. In addition to Eco-Model Cities, the Council now promotes the efforts of “FutureCities” as well.

4. Activities

With “FutureCities” and “Eco-Model Cities” in the forefront, member municipalities are learning from one other to broaden their perspectives. Examples of activities are assistance in the development of action plans, commendations for excellent approaches, development and dissemination of “FutureCity” and Eco-Model City, sharing of information regarding leading practices among Future Cities, Eco-Model Cities, and other members, as well as academic research and mutual enlightenment.

Sharing of information on measures and results of their approaches

International conference in fiscal 2011
▼600 people including guests from overseas attended
▼Leading cases at home and abroad were shared

Eco-Products 2012
▼The largest environmental event in the country
▼Publicized the approaches by the members of the Promotion Council for the “FutureCity” Initiative

Sharing of information on measures and results of their approaches

Working-level activities as a working group
Environment and super aging have been covered in addition to low carbon since fiscal 2012

Approaches in fiscal 2011
-Working group to share issues and consider solutions for issues in low-carbon urban development
→ Actions for low-carbon urban development were considered
-Green economy working group
→ Compatibility between global warming mitigation measures and local revitalization was considered
- Working group for the unification of expedited calculating methodology for greenhouse gas emission
→ Greenhouse gas measuring methods were studied

Shimokawa Town, Hokkaido

Area: 644.2㎢
Population: 3,613

Shimokawa , Forest Future City where People are shining

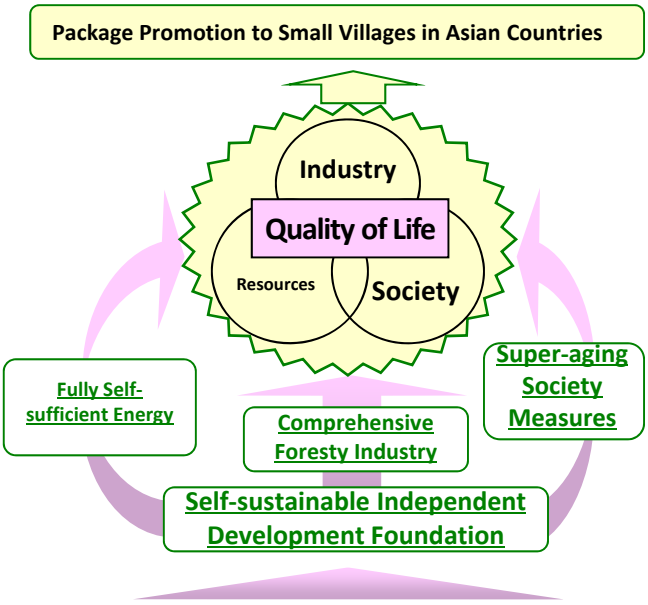
Future Vision

Shimokawa is a town located in the interior of the northern part of Hokkaido. Approximately 90% of the town's area is covered with forest, with forestry and agriculture as its key industries.

Shimokawa will complete the "Forest Future City" model by 2030 with the know-how of constructing a society living cooperatively with the forest that they have been building for more than half a decade. It will promote the policy and the business package of the urban model Forest Future City from Shimokawa with other Asian countries for their urban development and region reconstruction.

Nestled in a rich forest environment, the Forest Future City is a place where the forest provides for people the resources to lead a spiritually rich life surrounded by trees, develop their mental/physical health, enjoy recreational activities, learn, and earn a generous income.

Furthermore, it constructs an independent comprehensive forest industry utilizing the abundant forest resources with maximum efficiency and aims to build a fully self-sufficient energy industry and economic society with a sustainable economy from making maximum profit from local resources by supplying energy to other local areas. It also builds the local society where everybody, including children, the elderly, and the disabled people can enjoy forest environmental education and forest therapy to develop mental/physical health through the forest culture with a safe, comfortable life with the mutual support and cooperation of the citizens and achieve self-actualization with a role in society for everybody.



PROJECT 01 Comprehensive Development of Forest-related Industries

[Innovating the Forestry and Forest Products Industry Systems]
The city will spur innovations such as light detection and ranging systems for resource analysis and raw material product management to efficiently utilize forest resources.

[Cultivating a Forest Culture]
The city will implement a symbol zone, hold wood design competitions and chain saw art contests to enhance its brand as a forest future city.

[Building a Deployable Comprehensive Forestry Industry Eligible]
The city will build a comprehensive forestry industry based on sustainable circulatory forest management and a zero emission wood processing system.

▲wood design Competition
"Wood Design Competition – All About Wood : We Think Re-Style in Art and Design"

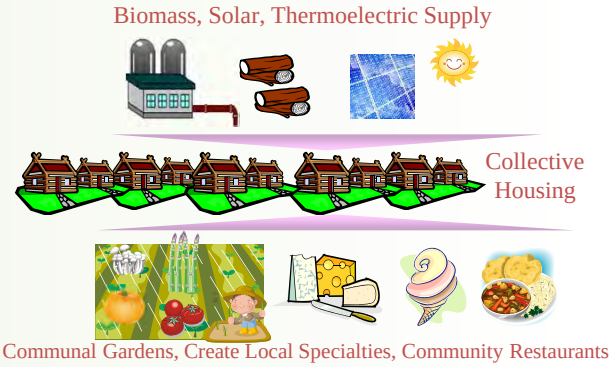
PROJECT 02 Toward Completely Self-sufficient Energy Supply

We are pursuing the goal of fully self-sufficient energy utilizing small-scale distributed renewable energy supply system for the purpose of creating a safe and stable energy environment where townspeople can live their lives without worry, prevent energy purchasing funds from leaving the town, and to maximize the intra-regional economic cycle.

PROJECT 03 Creation of a Self-sustained Community via Transition to Collective Housing Model

As super-aging continues in the Ichinohashi area in Shimokawa, it can serve as a model where efforts will be made to reduce the environmental impact, utilize the regional special characteristics to construct community housing, reconstruct social communities, and create new industries and food self-sufficiency for the elderly and young.

In addition, in order to achieve energy self-sufficiency, a regional thermoelectric supply system utilizing renewable energy, and a model to simultaneously deal with the two issues of energy self-sufficiency and super-aging society will be created.

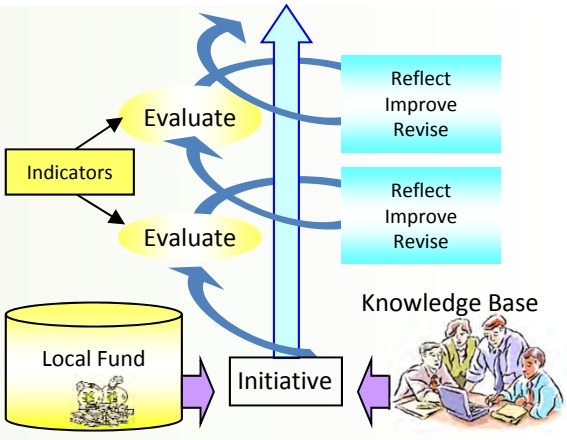


PROJECT 04 Development of Self-reliant and Autonomous Infrastructure

[Construction of knowledge base for Regional industries]
Establish an organization known as a knowledge hub that corresponds to the changing times with the effective use of local resources and to develop the necessary local technology and cultivate human resources.

[Establishment of local fund]
A local fund will also be established for independent management that enables the town to make financial arrangements and efficient fund infusion.

[Development of indicators richness]
Ensure an infrastructure for the independent and self-autonomic development by evaluating the consistency of the value demanded by the citizens and the contents of approaches, and by developing a model of self-autonomic management that leads to the improvement of these assessed efforts.



Kashiwa City, Chiba Prefecture

City of Kashiwa, The University of Tokyo, Chiba University, Mitsui Fudosan Co., Ltd., Smart City Planning Inc., Urban Design Center Kashiwa-no-ha and TX Entrepreneur Partners

Area: 115㎢
Population: 404,800 (1/2013)

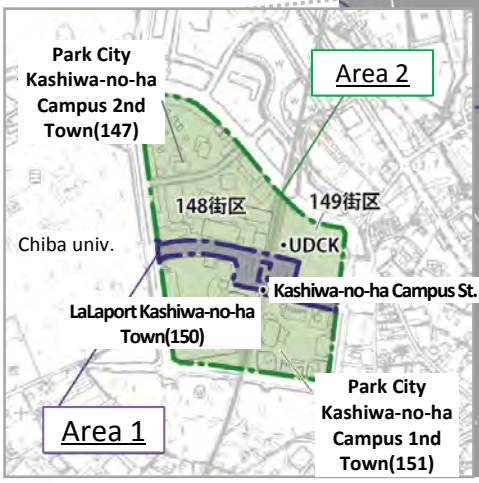
Kashiwanoha Campus City Project "Autonomous Urban Management with Partnership among Public, Private and Academia"

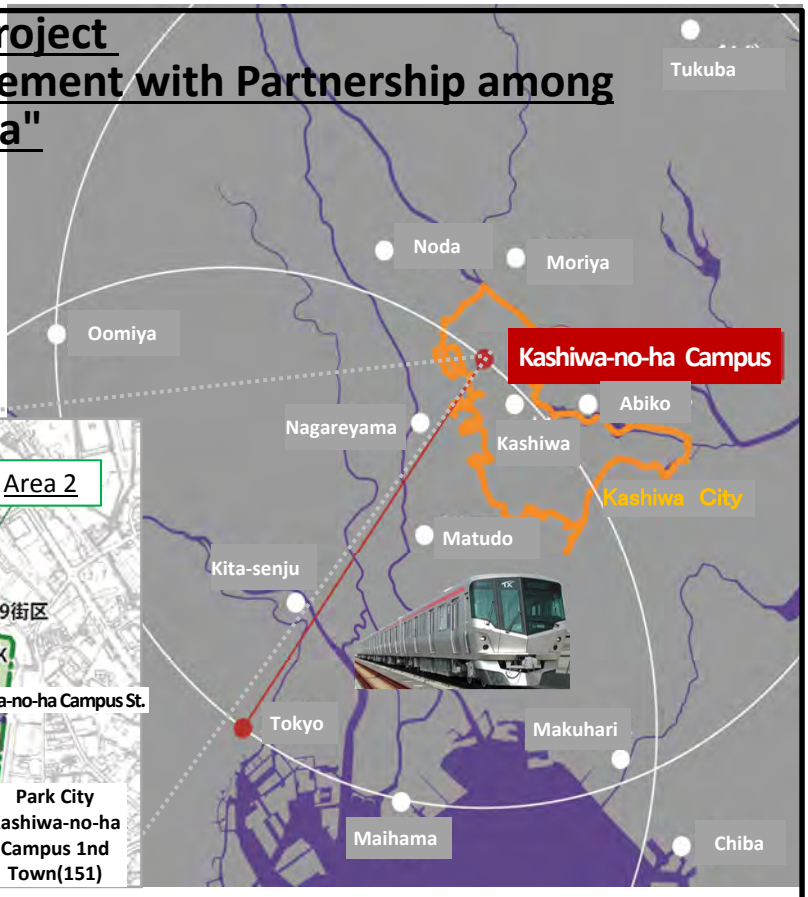
Kashiwa City:
A core city of 400,00 people in the greater Tokyo metropolitan area, just 30 minutes by train from the heart of Tokyo

Kashiwanoha:
Located in Northwest Kashiwa. In 2005 the TX train began service. Along the train tracks a new city was developed, connecting to the general area.

Area 1
Flexible operation of roads based on local rules.

Area 2
Power interchange in the city.

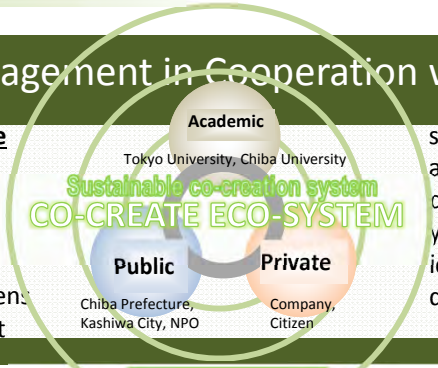




Future Vision

Autonomous Urban Management in Cooperation with Public/Civic/Academia

CO-CREATE ECO-SYSTEM, sustainable co-creation system, that allows universities to make plans as to the greatest resources of Kashiwanoha campus combining their cutting-edge knowledge with that of the local citizens and companies to manage the project



sustainably and independently and to allow everybody who wants to contribute to the area, from the elderly, young people, and children with fresh ideas, to participate in urban development.

Achieve the safe/reassuring/sustainable city where everybody wants to live

PROJECT 01 Smart City

Prosperous local energy management with the utilization of 100% natural energy and the participation of the citizens

[Numerical Goal]

- ◆Decrease in amount of CO_2 emissions from the joint development →**About 40%** cut down Per work facility: **About 50%** cut down (2014)
- ◆Decrease in amount of CO2 by implementation of smart meter →**About 15%** cut down (2014)
- ◆**Ensuring the minimum power** needed in local disaster prevention in Kashiwanoha Campus Station and five surrounding area for **three days** (2014)
- ◆**Decrease in number of automobiles and increase in number of bicycles** (2028)

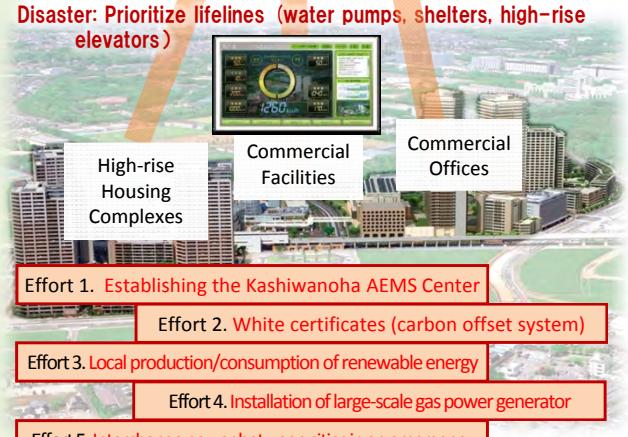
Effort 6. Enlargement of the multiple transportation sharing/system

Effort 7. Establish Kashiwa ITS information center

Area energy management system (AEMS)

Normal: Efficient use by local energy unified management

Disaster: Prioritize lifelines (water pumps, shelters, high-rise elevators)



Effort 1. Establishing the Kashiwanoha AEMS Center

Effort 2. White certificates (carbon offset system)

Effort 3. Local production/consumption of renewable energy

Effort 4. Installation of large-scale gas power generator

Effort 5. Interchange power between cities in an emergency

PROJECT 02 Healthy Long-life City

A society where people can live an active and self-sustaining life by active participation in the society and utilizing mobility environment utilizing ICT

[Numerical Goal]

- ◆Installation of total health care stations → three **stations** (2014) → **seven stations more** (2016)
- ◆Increase in number of service cases by ambulatory rehabilitation office/in-home rehabilitation →**1.5 times more** (2016)
- ◆Improvement the situation of service participants

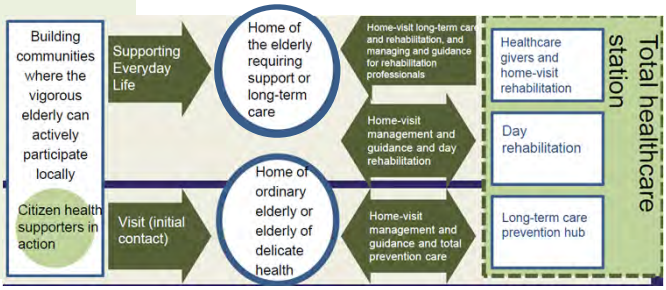
Efforts and Collaboration between the University of Tokyo and Chiba University

Effort 9. Construction of a community where the elderly can contribute to the area

- Establishment of public health supporter training course
- Create a mechanism for senior social business
- Active senior citizen local activity project

Effort 8. Create total healthcare station

- Disease prevention and care services to all elderly
- Provide physical therapy, oral care, nutrition counseling
- Physical therapists, dental hygienists, nutritionists, etc.



PROJECT 03 New Industrial City

International environment with an active industry which cultivate businesses in the local area utilizing Japanese technology

[Numerical Goal]

- ◆Increase in number of investments utilizing a tax system promoting investment for the local universities/research and development venture companies →**5** (2016)
- ◆Increase in the amount of support for the venture companies in the city by TEP →**70** (2016)
- ◆Increase in number of fieldwork-style verification experiments in the city →**80** (2016)

Effort 11. Effecting model cases of business startup support by individuals

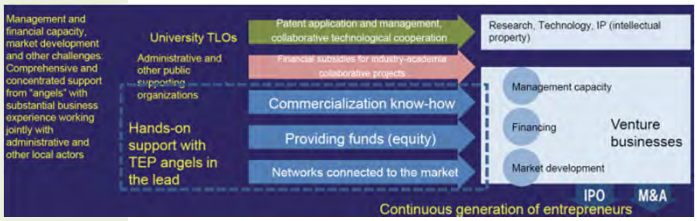
- Support
- Support public relations of ventures

Effort 10. Comprehensive support for university and research institute ventures

- Expand the angel tax system
- Preferential credit guarantee acquisition
- Support venture staffing

Effort 12. Networking of ventures from Asian universities

Hold international awards for Asian venture tech companies at Kashiwanoha.



Effort 13. Local-Power Points Program for local actors nurturing local power

- Grant points for participants in local activities and social experiments
- Mutual cooperation and management efficiency for efforts in the common point system

Effort 14. Flexible sustainable management of roads etc. on the basis of local rules

- Sustainable management of roads and other public spaces by urban development organizations
- Permit use as a place of social experiments and local activities
- Sustainable management of high-quality urban space

City of Yokohama, Kanagawa Prefecture

Area: 435㎢
Population: 3.7million

OPEN YOKOHAMA

Creative Port City where People, Things and Events Connect and Develop

Future Vision

Yokohama, in its pursuit of becoming a “city where everyone would want to live,” will overcome challenges together with citizens and local companies and leverage “citizen power” that would innovate the society to further enhance the city’s appeal while undertaking “urban renovation” to incorporate new systems and services with a focus on three pillars.

◇ Natural infrastructures that serve as a backbone of the city

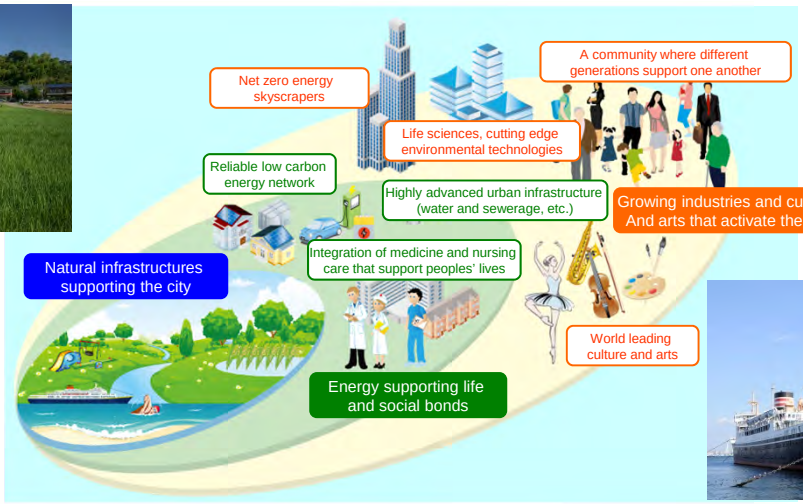
Stimulating new encounters, activity and creativity with characteristic neighborhoods with water, greenery, ports, and historic buildings

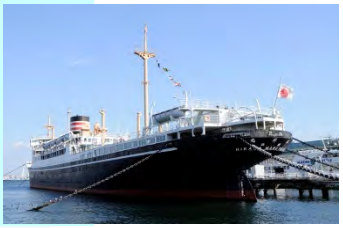
◇ Energy that supports livelihood and social bonds

Supporting the happy lives of its citizens with a low carbon energy network that integrates information technologies and a continuous system that supports the elderly, disabled, young generation, and children

◇Growing industries and culture and arts that activate the city

Revitalize the local community and economy by creating growing industries such as environmental technologies, life innovation, and social businesses, and building a city with excellent culture and arts

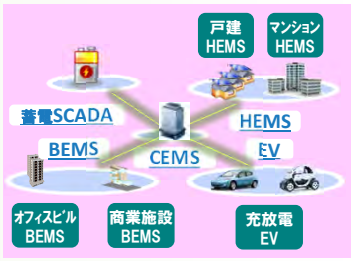




PROJECT 01 Initiative to address World Two Major Environmental Challenges, "Low- carbon and Water"

Formulation of Community Energy Management System (CEMS)

- Through large-scale citizen participation, introduce a large number of renewable energy, and build a CEMS that connects to the electrical grid. Furthering examples in various urban areas, we aim to expand overseas and to contribute to the spread of power supply problems in the country.
- In the Minato Mirai 21 area, to be a business zones that is not affected by rolling blackouts, specified electric industries will be considered.
- Promote the spread of electric vehicles, the use of storage batteries and development of next generation charging infrastructure.



International contribution utilizing Yokohama's water and sewage technology

- Support overseas expansion utilizing the water and sewage technologies and know-how of various private companies through the activities of the "Yokohama Water Business Association", which has 133 groups.
- In cooperation with JICA, together with developing a framework for practical training of human resources development of water supply entities in 17 provinces and 1 city in central Vietnam, "Yokohama Water" (a Waterworks Bureau Formed Company), provides consulting and training for companies' overseas business.

PROJECT 02 A comfortable neighborhood where people are connected

◇ Sustainable residential neighborhood model project

The City will strive to build a compact residential neighborhood that enables everyone to live at ease in their familiar environments. For example, the city will concentrate urban development around train stations which serve as the hub for daily life to maintain the living standards of the suburbs and ensure accessibility with transportation nodes. Moreover, the city will work to resolve various regional issues such as aging society, energy conservation, and disaster control by making full use of the private sector to "build a sustainable residential neighborhood that takes into consideration the super aging society and environment."

- The City, together with Tokyu Corporation, is working with the local community, companies, local government, universities, etc., to comprehensively resolve regional issues (childcare support, medical care / nursing care / local transportation, etc.) in the district north of Tama Plaza Station.
- The City will strive to "build a sustainable residential neighborhood that takes into consideration the super aging society and environment" in areas near Tokaichiba-cho, and Yokodai

PROJECT 03 Creation of centers to attract industry and to disseminate culture to the world, especially to Asia

Consolidate Global Urban Brand

- Create a world-class art and culture city where art, dance and music festivals are held on a three-year rotation. In addition, via renovation of historic buildings, form a "creative neighborhood" where artists will create, present and stay.
- Via the charm of these activities, promote attracting MICE (many visitors expected at business events), event-hosting support and attracting overseas visitors.

Smart Illumination Yokohama2012
Photo：amano studio

Create an Industrial Base for Continuous Innovation

- In addition to expanse of the Enterprise Location Promotion Ordinance, receive designation of the Special Urban Renaissance Urgent Development Area, attract global companies to put their Asian headquarters and R&D base here, selected as Comprehensive Special Zone For International Competitiveness Development, create an internationally competitive base for life science at Keihin Rinkai.
- Promotion supporting the social advancement of women-entrepreneurs, and developing capacity to contribute to children.

Yokohama Bio Industrial Center

City of Toyama, Toyama Prefecture

Area: 1,214.85㎢
Population: 422,000

Construction of Toyama style urban management with compact city strategy

-Towards sustainable and value creating city filled with social capital-

Future Vision

1. Compact urban development centered around public transportation

Enhance the public transportation network including the railway in order to achieve a “compact urban development centered around public transportation” where various urban functions including accessible life services such as residential and commercial facilities, workplace, and entertainment / leisure are concentrated alongside convenient public transportation.

2. High-quality and appealing citizen life

Achieve a closely connected people-centered town with urban functions including commercial and cultural facilities accessible on foot, a community with strong relationships and intergenerational communication between the young and the elderly, and a slow village style life.

3. Promotion of industrial activities that take full advantage of local characteristics

Achieve a robust and spontaneous industry structure by clustering internationally competitive pharmaceutical related industries to realize a “Medical City Toyama”, as well as promoting renewable energy related industries that make use of natural characteristics.

Toyama’s vision for “compact urban Planning”

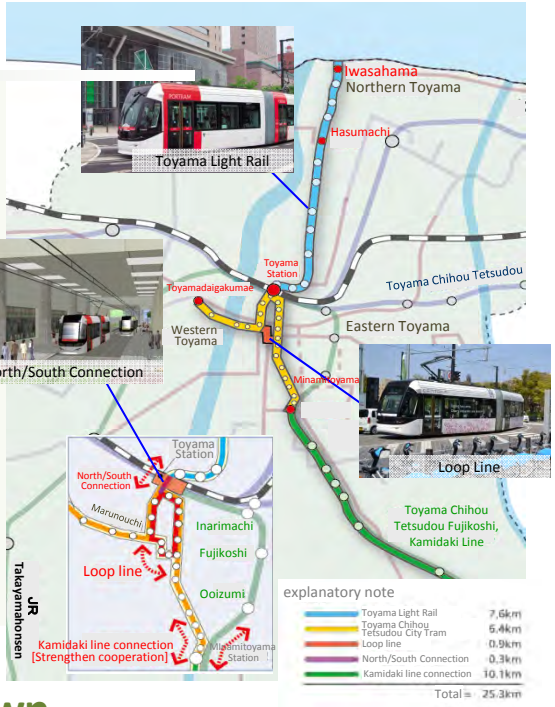
PROJECT 01 Construct LRT Network

By promoting the conversion of existing train routes to LRT networks and enhancing the convenience and attractiveness of public transportation, a shift away from lifestyles overdependent on cars, and a senior-friendly, low-carbon city can be achieved.

[Connecting Toyama Light Rail and City Trains]
In conjunction with the opening of the Hokuriku Shinkansen in 2014, connect north south trains with the Toyama Light Rail under elevated railroad tracks to increase access to the central area from the northern district and build a highly convenient LRT network, and improve the living environment and urban functions of the city center.

[Change the Kamidaki Line to LRT]
Investigate feasibility of LRT network connecting to the Kamidaki Line at Minamitoyama Station

[Change Toyama Light Rail to Double-track railway]
To ensure punctuality, change one section of the Toyama light rail to a double-track railway



PROJECT 02 Creation of a Healthy and Sociable Town

In order to achieve development of a compact city where the elderly can live safely and securely, create a healthy and sociable town which helps promote the health of the elderly in the city center.

[Create a safe, secure, and comfortable walkers' network]
①In addition to care, medical and commercial facilities, attract restaurants and rest areas that can function as places for socializing
②Build pedestrian walkways for the above facilities

[Create Opportunities for elderly to go out and socialize]
①Support citizen activity groups which promote intergenerational exchange and fulfilling lives for elderly
②Create a cooperative civic mechanism to utilize parts of public facilities for activity areas

[New Toyama-style Day Service Locations]
①Develop a support system to promote new locations even in in the expensive city center


Town walking tour using walking support equipment

PROJECT 03 Sixth-Order Industrialization of Agriculture Using Heat from Ushidake Hot-Spring

Yamada District [in Akamedani], a district facing an aging society and depopulation, will build a hydroponic plant factory with fully artificial lighting using heat from the Ushidake Hot-spring and solar power. The entire process including production, processing, and distribution and sales of perilla will be integrated and local specialty products focusing on environment and health will be newly created.

[Using Renewable Energy]
- Reduce energy costs in factories by using heat from hot-spring and solar power generation

[Revitalizing the Community by Sixth-Order Industrialization]
- Promote sixth-order industrialization of agriculture by integrating the entire process of production, processing , and distribution and sales, as well as newly creating specialty products, which would contribute to revitalizing the community

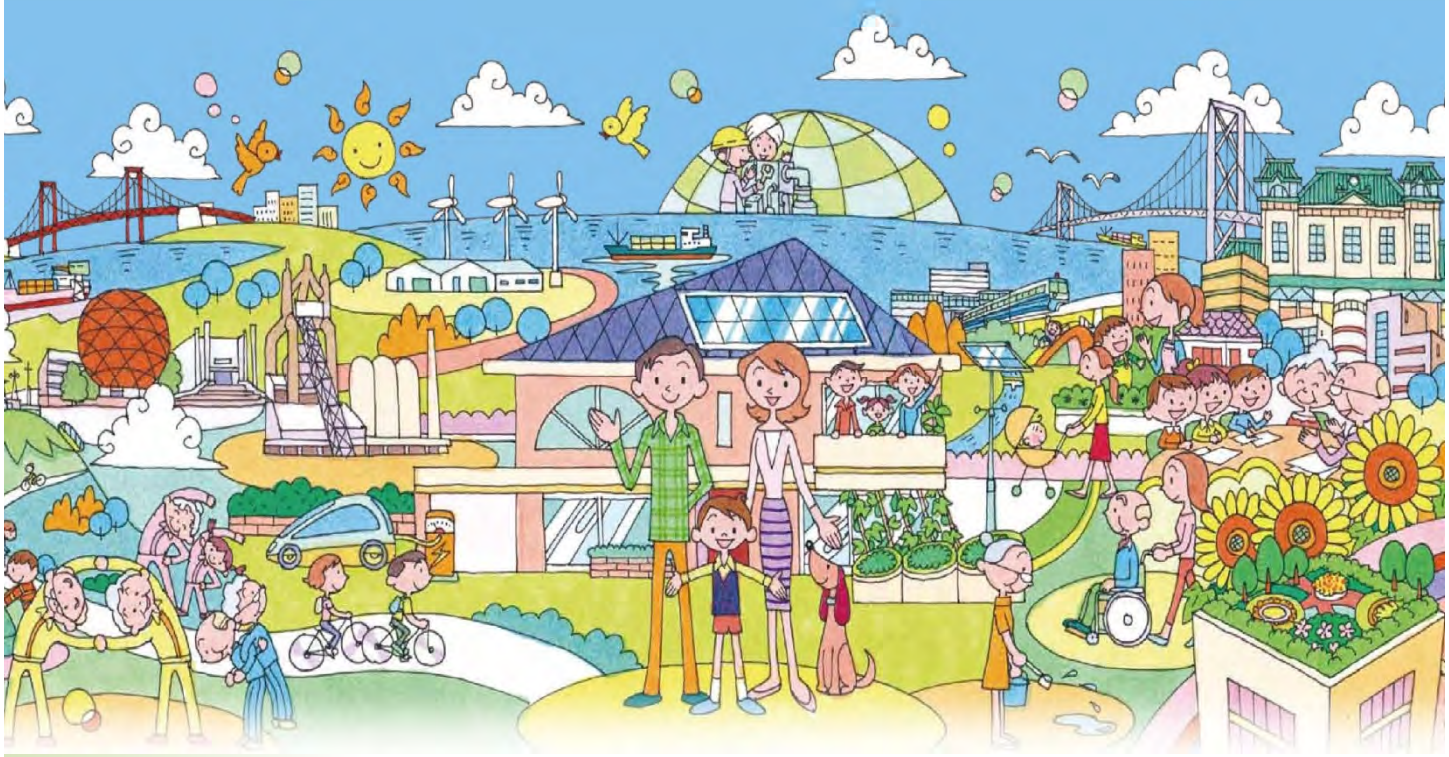
[Realizing a City of Health and Longetivity]
- Employ seniors, etc. in factories to enhance happiness levels of life
- Supply highly nutritious perilla to hospital meals and school lunches throughout the city


Perilla
Plant Factory [Image]

Kitakyushu City, Fukuoka Prefecture

Area: 488.78㎢
Population:972,000

Kitakyushu FutureCity



Future Vision

A bustling, secure, and vigorous city where people can shine

Utilizing the experience from dealing with pollution and the innovation of sustainable creation

Kitakyushu aims for a city by 2050 connected with the world with KIZUNA (a connection) for environment. It will achieve a lively city where people can live a safe, secure, healthy and high quality life under a rich environment connected by KIZUNA (a connection) between all generations focused in the area by 2025.

Create Environmental Value

Use Energy Carefully

○Decrease the discharge of greenhouse gas
15.6 million tons (2005)
→11.8 million tons (2025)

Close by to Peaceful Nature and Waterside Areas

○Increase in ratio of greening in the city
17%(2010) →30% (2050)

A Clean City without Garbage

○Household domestic garbage
506 g (2009) → 450 g (2025)
○Household recycling rate
30.4% (2009) →40.0% (2025)

Create Social Value

Lead a Healthy and Happy Life with a Sense of Purpose

○Increase the rate of the elderly participation in the local activities. 40.9% (2010) →50% (2025)
○Increase the rate of citizens who feel that health maintenance projects are improving. 26.7% (2010) → 30% (2025)

Securely Raise Children

○Increase the rate of citizens who feel that support for security projects is improving.
21.3% (2010) →25.0% (2025)

Create Economic Value

Keep Learning/Working in the City

○ Increase international business plans to make Kitakyushu Town a center for low carbon in Asia.
1 project (2010) →About 100 projects (2025)

FutureCity Kitakushu

PROJECT 01 Kitakyushu Smart community Creation Project

In Higashida, Yahatahigashi, along with the creation of an adept energy management mechanism via introduction of solar and other renewable energy power generation and installation of energy-saving features into buildings, through encouraging control from the demand side by utilizing dynamic pricing and incentive programs, make efforts to create a regional energy management system and achieve a regional shift to low-carbon.

PROJECT 02 Forest-in-town Project

We aim to create a “city in harmony with nature” where all people from children to the elderly participate in activities that transcend generations, and is also a place where rich nature can be felt close-by through efforts to conserve satoyama, restore devastated bamboo forests and utilize vacant land to grow vegetables and saplings. Through these activities social cohesion can also be restored.

PROJECT 03 Promoting a Healthy Lifestyle in the Community

Utilizing civic centers and other community bases, in addition to the local residents of the Urban Development Association, Meeting of Activists for Health Promotion and the Committee on Improving Dietary Habits, collaborate with the Medical Association, Dental Association, Pharmacist Association, Nutritionist Association and public administration (public health nurses) for health promotion projects where local residents take the lead, to conduct health promotion throughout all stages of life.

PROJECT 04 School Helper

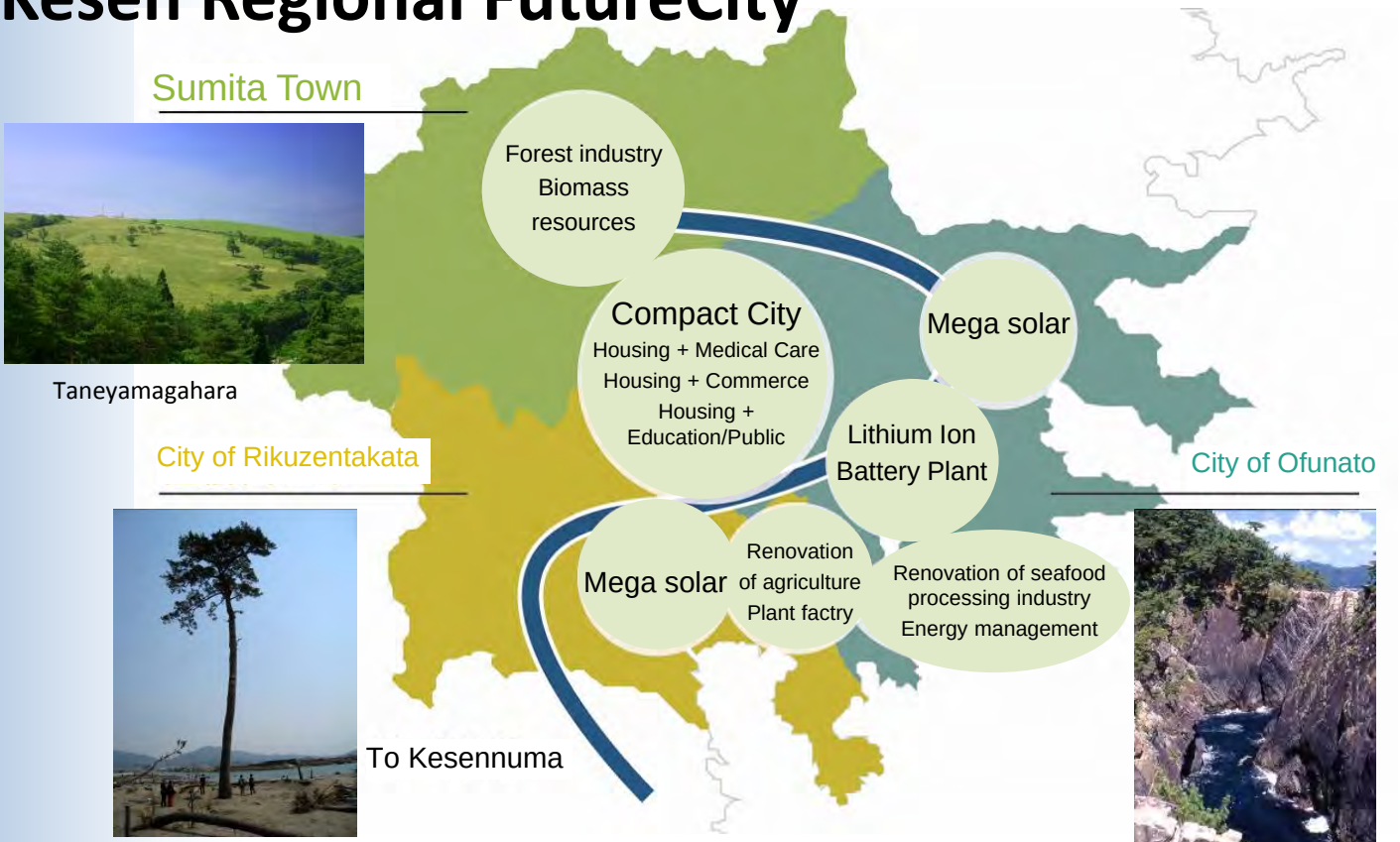
This is a unique volunteer project where children’s guardians and locals will be registered as "school helpers" at schools to support the educational activities of the school. They have an extensive range of activities such as watching over the students to and from school, helping prepare class and teaching materials, reading aloud and organizing books. Using this project as a symbol to unite citizens, Kitakyushu City is promoting urban development with the aim of "Number One School Helper Town in Japan ".

PROJECT 05 Asian Low-carbon Center

With the public private partnership as the core of a "low-carbon center in Asia", package a combination of technologies and social systems pertaining to urban environmental infrastructure in accordance with the needs of partner countries through utilizing Kitakyushu’s inter-city network and export to other Asian countries. Through such activities, we aim to be the base of the environmental business in Asia.

Area*: 890.42 ㎢
Population*: 67,000
*Total of the 3

Kesen Regional FutureCity



Taneyamagahara

The “Lone Pine Tree”

Goishikaigan,
Ranbouya

Future Vision

After the devastating Great East Japan Earthquake, the cities of Ofunato and Rikuzentakata, both located on the Pacific coast, have promoted and organically coordinated a number of projects in an effort to become a world-leading FutureCity which would play a leading role in creatively reconstructing the disaster-affected area, while synergistically creating environmental, social and economic values.

The City will strive to realize a society where its citizens can enjoy safe and secure lives by locally producing and consuming its energy from distributed energy sources, by installing mega solar power plants with energy storage systems and by bringing smart innovation to public facilities to stably supply power to the region.

The City also aims to become a city comfortable for everyone with measures in place to respond to the super-aging society. This includes developing a compact city where urban functions such as medical care / nursing care / social welfare, commerce, tourism, transportation and regional energy are concentrated, and also introducing a transportation system that would connect the upland communities and central downtown.

The City will build vibrant and sustainable local communities by making full use of the respective characteristics of the two cities and one town. The cities and town will also cooperate with each other such as by introducing advanced technologies to industries, promoting agriculture, forestry and fishery by utilizing stable and efficient electrical energy and rich local resources, and also by inviting environment/energy related industries to the area.

PROJECT 01 Building a society where energy is produced and consumed locally

Building solar power plants with storage batteries

De-centrally install mega solar power plants with energy storage systems and create a local energy production/consumption system.

Constructing a hybrid energy system for existing electricity and renewable energy

Construct a hybrid energy system for existing electricity and renewable energy by closely coordinating with electric power suppliers.

Creating Smart Grid Networks that Utilize Natural Energy

Reduce the volume of electricity purchased from power companies by introducing to public facilities designated for disaster prevention solar power systems with storage batteries as well as an energy management system to automatically control the charge and discharge of storage batteries.

Environmentally sustainable photovoltaic power plant (image)
Forum for East Japan Smart City Project / Meidensha Corporation

PROJECT 02 Promoting a city comfortable for everyone with measures responding to the super-aging society

Developing a compact city

Strive to build an attractive city where there are strong relationships both within and outside the city by concentrating urban functions in the disaster-affected central downtown, and by coordinating with various reconstruction projects.

Also aim to become an environment-friendly city and establish a base for local production and consumption of energy utilizing renewable energy.

Creating an advanced model integrating medical care/nursing care/health care/welfare

Design, develop , and operate a local medical database model, and construct a local medical integration system. This is to be led by a committee consisting of institutions and groups related to medical care , nursing care, and social welfare.

Compact City(image)

Medical Care, Nursing Care, Health, and Well-being Association

PROJECT 03 Promoting new industries

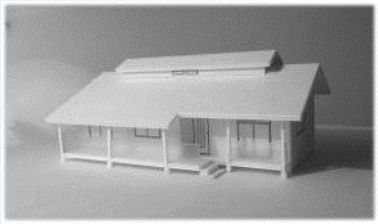
Introducing advanced technologies to industries

Construct advanced plant factories utilizing renewable energy, implement an energy management system to save energy and electricity in seafood products processing, add high value to local products, and construct a distribution model, etc. to strengthen the market competitiveness of local products.

Developing an environmentally symbiotic Kesen wooden restoration housing complex model

Set up a committee consisting of institutions and groups related to forestry, promote environmentally symbiotic Kesen wood restoration housing, and construct a housing production system in order to utilize the area's rich forest resources and also to further promote development of the forest industry.

Seminar on industrial development



Environmentally symbiotic Kesen wooden restoration housing (image)

City of Kamaishi, Iwate Prefecture

Area: 441.43㎢
Population: 37,875

Kamaishi FutureCity Initiative

Kamaishi's new challenges leading other small-scale cities

Main Numerical Goal

◎**Local Energy Generating Ability**
- 181.470 kW (2011) -> 240.000 kW (2015)

◎ **Percentage of renewable energy within local power generation**
- 25% (2010) -> 45% (2015)

◎ **Percentage of employed elderly over 65 years old**
- 12.2% (2005) -> 15% (2025)

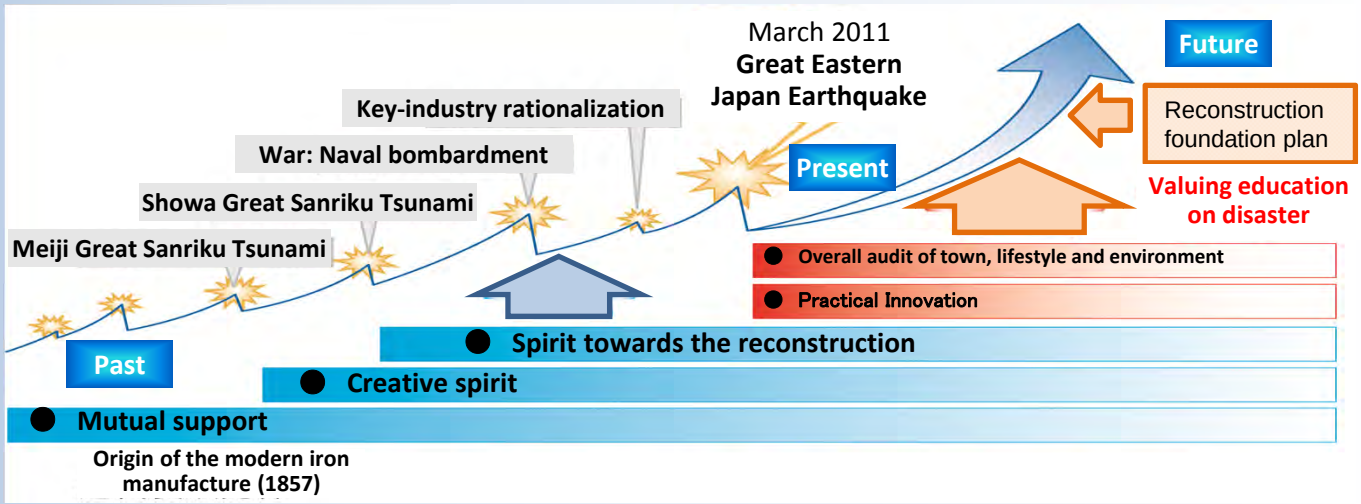
◎ **Percentage of people who want to stay in Kamaishi**
- 64% (2009) -> 80% (2015)

Future Vision

Kamaishi in 2050

Rich environment and comfortable life	Fulfilling life with places to work for	Interaction between people, things and information
Resource cycling society by promoting low carbon, power saving/resource saving	Town of mutual support where people can enjoy their role in society	Interconnected city where people and cities are connected

"Town shining on the land of Sanriku, filled with hope and smiles



PROJECT 01 Resource Recycling Society by Reducing carbon emission, promoting Energy Saving and Resource Saving

1. Promotion of local production/consumption of energy

- Promote implementation of various types of energy utilizing the storage of electric generation facilities.
- Expand the verification business by establishing a collective reconstruction model "New energy community model"
- Promote the independency of the energy environment of base facilities in town

2. Create industries utilizing various types of energy

- Research the best combination of various types of energy and create new industries utilizing local energy and exhaust heat.
- The city will take advantage of its abundant forests and establish an effective wood supply system to promote woody biomass energy.

PROJECT 02 Creation of Industrial Welfare City Kamaishi

1. Urban development where the elderly can have their motivation for life

- Employment support for the elderly to consolidate the environment where people can work for their entire life
- Create chances to interact with people for the elderly and the local people by utilizing the community center for the elderly
- Create structure where the elderly can contribute to society through the interaction with the young people

2. Coalition of health, medical care, welfare and nursing care

- Enhance the role of the life support center
- Build a caretaking structure in the new energy community model
- Build a local network of healthcare, medical care, welfare and nursing service
- Enhance the support system by the home care center after leaving the hospital .

PROJECT 03 City Building with the Effective Use of Historical Environment ～Kamaishi Field Museum Initiative～

1. Deployment of the field museum initiative

- Create a structure that shows the town's history and the progression of the reconstruction as it is to the visitors.
- Crystallize the participatory approaches that heighten the awareness of disaster prevention as a way of sharing local identity

2. Information transmission on industrial heritage to abroad

- Share the value of the remains of Hashino blast furnace and deploy action aiming for the registration to UNESCO

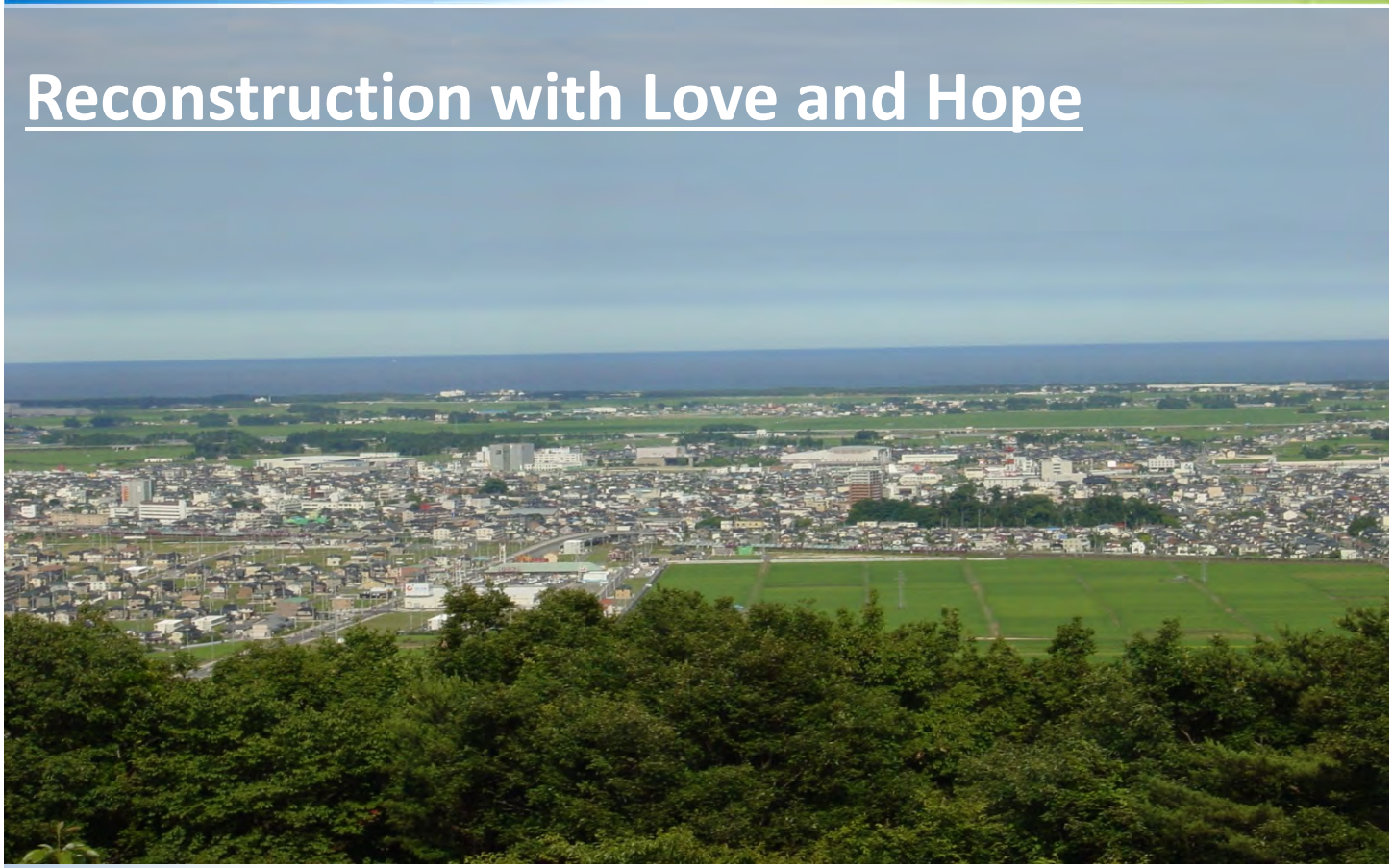
3. Approach to attract the Rugby World Cup

- Attract the Rugby World Cup in 2019, the citizens' shared goal
- Attract sports tournaments/training camps/induction courses toward becoming a hub for sports exchange
- deploy the related hard/soft businesses aiming to send the players as representatives from Japan

City of Iwanuma, Miyagi Prefecture

Area: 61㎢
Population: 44,000

Reconstruction with Love and Hope



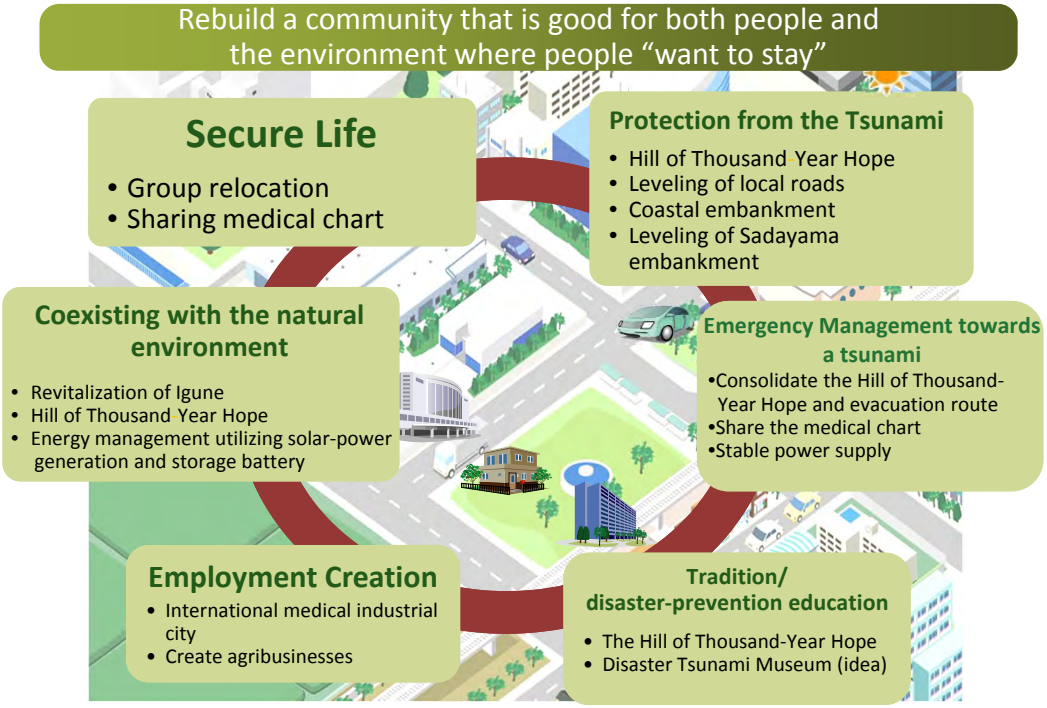
Future Vision

Iwanuma aims to be an ecologically compact city where the elderly can have a rich and secure life and which utilizes the historical rural landscape surrounded by the Sadayama Canal and Igune built in the Edo period.

Another aim is to create a place with a next-generation agriculture business where the elderly can work carefree even in the super-aging society in which the citizens can have a rich and healthy life with an active and sustainable economy by promoting the medical industry by 2050.

An ecological compact city with a rebuilt community made by group relocation from the coastal areas to the east part of the city will be put into place by 2020.

The town will use the medical cloud for health management so that the elderly can live securely. It will build an independent energy system as well as the Hill of Thousand-Year Hope, which can also be used as an evacuation center in an emergency. It will also aim for well disaster-preventing urban development, which is also good for both people and the environment.



PROJECT 01 The Hill of Millenium Hope

① Shift perception from “preventing tsunami” to “disaster mitigation”
⇒Establish a gently sloping hill in the destroyed coastal area to mitigate and disseminate impact. Together with seawall, eliminate anxiety of residents and corporations through multiple defense.

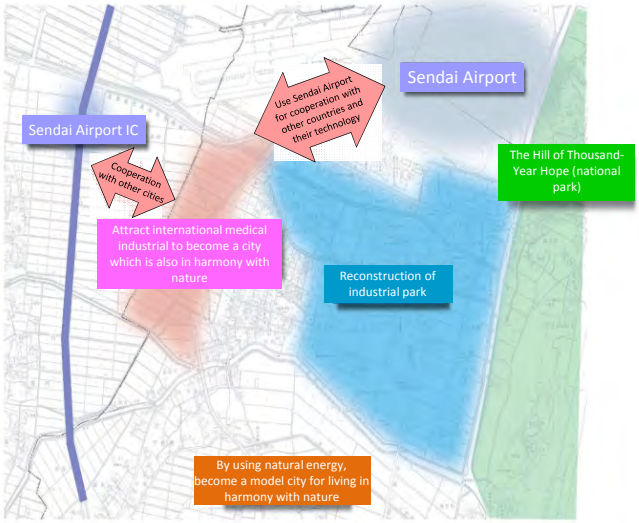
② Utilization of rubble
⇒Bury concrete shells that do not contain toxic substance inside in order to leave evidence of threat from nature as well as human wisdom for future generations.

③ As part of the park, plant trees that match natural features when constructing the hill.
⇒Environmentally contribute to creation of landscape as well as preservation of the ecosystem.

④ Call for support from both public and private sector in and outside Japan

PROJECT 02 International Medical Industrial City in Harmony with Nature

①Pressing need to create employment ⇒Scheme by Miyagi Prefecture ＝Collect medical industry and green energy industry
⇒Invite R&D operations and medical related companies to areas around Sendai Airport
⇒As it is an industry that has a wide market coverage, we can expect effects to spread out widely
②By inviting R&D operations of medical and health segments as well as related industries, we can accumulate and revitalize industry and advance medical technology
⇒This will lead to preparation for super-aging society.
③Specific Actions
Following a report published in March 2012 by the Study Group for Realizing Harmony with Nature and an International Medical Industry City, the City established a “Healthcare Industry Policy Division” in April to build basic concepts and conduct feasibility studies.
④With urban development, we will make efforts to utilize renewable energy within the area. ⇒Establish a supply system that can cope when power source is cut off.



PROJECT 03 Next-generation Agribusiness

Many of the farmlands were inundated by the tsunami. Due to poor drainage and damage from salt, restoration of fields and rice cultivation will take time. Therefore, to quicken the recovery of agriculture and restore the livelihoods of farmers, the food service industry and others will attract agricultural corporation companies, implement next generation models of agribusiness super energy-efficient hydroponic cultivation technology, and create jobs for affected farmers and the region.

(Photo source: Ministry of Agriculture, Forestry and Fisheries and Ministry of Economy, Trade and Industry)

City of Higashimatsushima, Miyagi Prefecture

Area: 101.86㎢
Population: 40,481

Future Vision

As a FutureCity, Higashimatsushima's "Urban Reconstruction Plan" is in line with its future vision.
Higashimatsushima aims to be a town in 2050 where people can be proud and live a healthy life, with hope for the future, attracting tourists from all over the world as a symbolic town that recovered from a natural disaster, and the generation that experienced the Great Eastern Earthquake supports the urban development with the next generation together.

Future Urban Reconstruction Concept

- Disaster resilient and safe
- Smiling with peace of mind
- Nurture industry, create jobs

Urban Reconstruction Plan = FutureCity

FutureCity Initiative Strategic Map

Future vision	Sustainable growth, safe, secure, compact city of Higashimatsushima		
Evaluation indicator	S-rank in CASBEE assessment		
Urban management	Develop management organization (aggressive regional management) Efficient investment based on medium and long-term Government-led measures	Civic collaboration	Town management organization (Protective local management) Elimination of waste by local authorities Driven by residents' needs Urban development subsidy system
Environmental value	Mitigation of environmental impact	CO2 reduction from decreased car use	Regional environmental conservation (Prohibit overdevelopment)
Social value	Foster an awareness of environmental conservation	Increase in healthy senior citizens	Fostering of "kizuna", a sense of social bonds among residents Increase security
Economic value	Increase local revenue via attracting tourism Job creation via promotion of environmental industry	Reduction of medical expenses and nursing care costs	Reduction of disaster risk (lost value) Increased income due to increase of visitors
Initiative – Area	Environment (low carbon and energy conservation)	Super aging society measures (community health)	Disaster prevention (disaster free)
Initiative – Concept	Local energy-independent, zero-carbon city	Active aging society and network medicine	Community disaster prevention via "kizuna"
Initiative – Evaluation indicator	Net zero GHG	CASBEE Health - highest ranking, per capita health care costs	Building earthquake resistant rate, rate of energy self-sufficiency within the region
Initiative – Solution	Multi-utility Smart grid Demand response Environmentally-friendly housing Storage batteries Fuel cells Cogeneration Clean cars Waste-to-energy Environmental education Green tourism Car sharing Solar power generation Wind power generation Biomass powwer generation Biomass power generation Tidal and wave power generation	Remote medical management residences Collaborative house Long-term stay resort Support network Barrier free town CASBEE health community Leverage senior citizens Outsource public administration services Promotion of senary industries New public transportation (community bus) Infrastructure for information on future generations (future building) Infrastructure for broadband communication (take into account during urban planning) Regional tourism infrastructureMATSUSHIMA JR Senseki Line (early recovery, urban planning centering on stations)	High ground residences Earthquake resistant buildings Disaster education and self-prevention Military joint command center Regional SNS Satellite phone Evacuation towers Altitude signs Matsushima Air Force Base (Use know-how) Multiple defenses SNS (Emergency contact during disasters)
Initiative – Regional resources	Favorable sun and wind conditions Regional biomass (local forest resources) Recycling resources Algae farming (effective use of flooded farmland) Waste (effective use of rubble)	("Kizuna" social capital) ? Foster a sense of unity during recovery from the disaster	
Interface	Local multimedia terminals		
Common infrastructure	Multiple broadband (telephone lines, communication lines), Wifi, disaster prevention PA system		

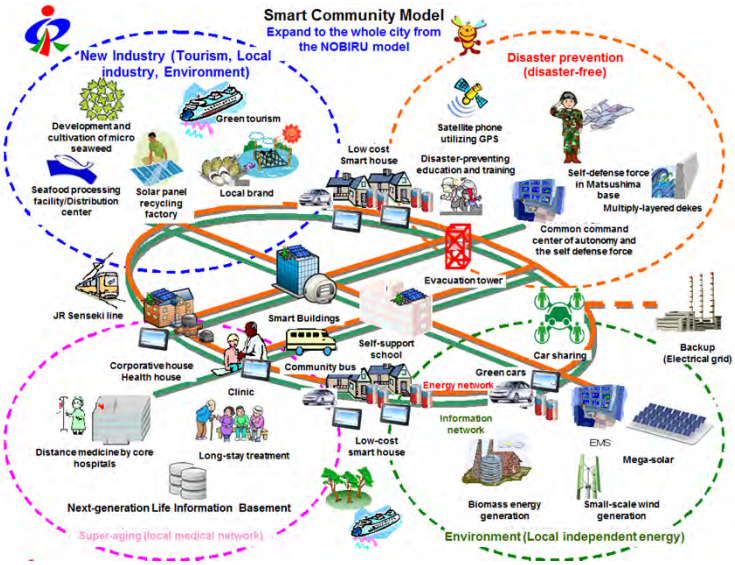
PROJECT 01

Environment

▼Achieve the Matsushima natural energy park initiative for creating local independent power.
▼Achieve net/zero/energy city (ZEC) for decreased greenhouse gases, centering on the home/transportation department.
▼Conduct environmental education and awareness raising activities for citizens so they take an active role and interest in the environment .

■Target: Energy-sufficiency ratio in town

Less than 1% (2011) ⇒ 120%(2026)



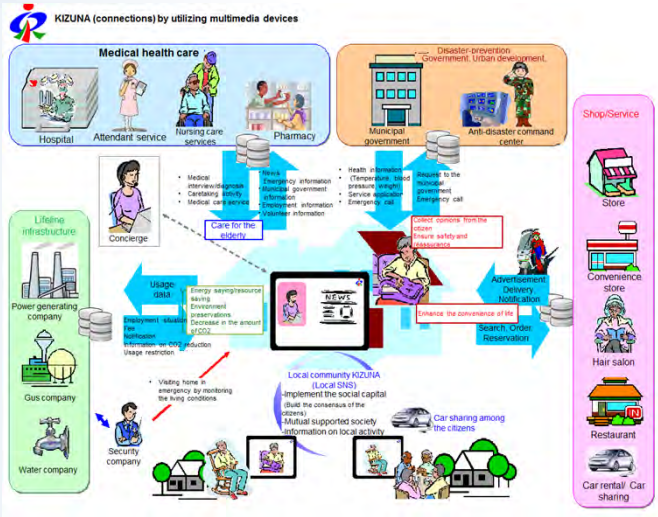
PROJECT 02

Countermeasures against Super-aging Society

▼Consolidate houses that are safe and good for health for cutting expenses for medical care for the elderly/nursing care/welfare.
▼ Construct a caretaking system for the elderly with the mutual support of the citizens.
to improve the support for the elderly who need nursing care and welfare (utilization of social capital).
▼Consolidate the transportation infrastructure to help the elderly go out more easily and provide places for employment for them for the assignment that aims to promote employment for the elderly.

■Target: Employment ratio for people > 65 years old

29.29% (2011) ⇒ 33.44%(2016)



PROJECT 03

Creation of Disaster-free City where people can live in safe for generations

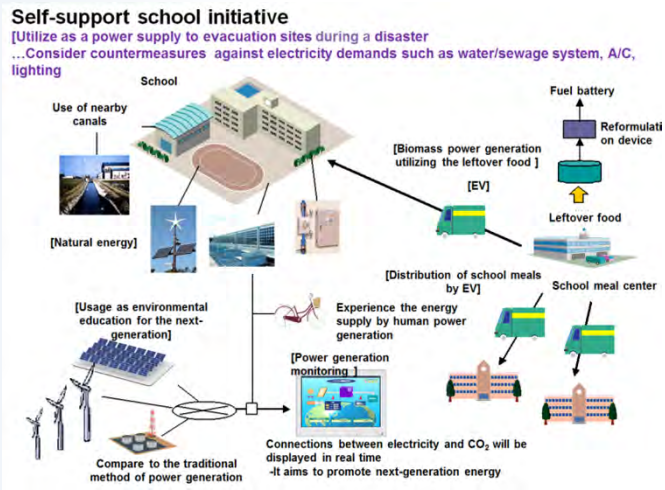
▼Create a city where people can live with one generation to another by ensuring citizens' safety from natural disasters such as typhoons, rainstorms, snowstorms, floods, tidal waves, earthquakes, tsunamis, and volcanic eruptions.
▼Improve life at public evacuation sites for constructing a self-sustained support function in the event of a disaster.
▼Construct disaster-preventing social capital and promote the revival of a strong local community to diffuse/pass the awareness of disaster-prevention to each citizen.

■Target: Energy sufficiency rate at evacuation sites

0% (2011) ⇒ 100% (2016)

People who come for observation/inspection of the disaster-preventing town

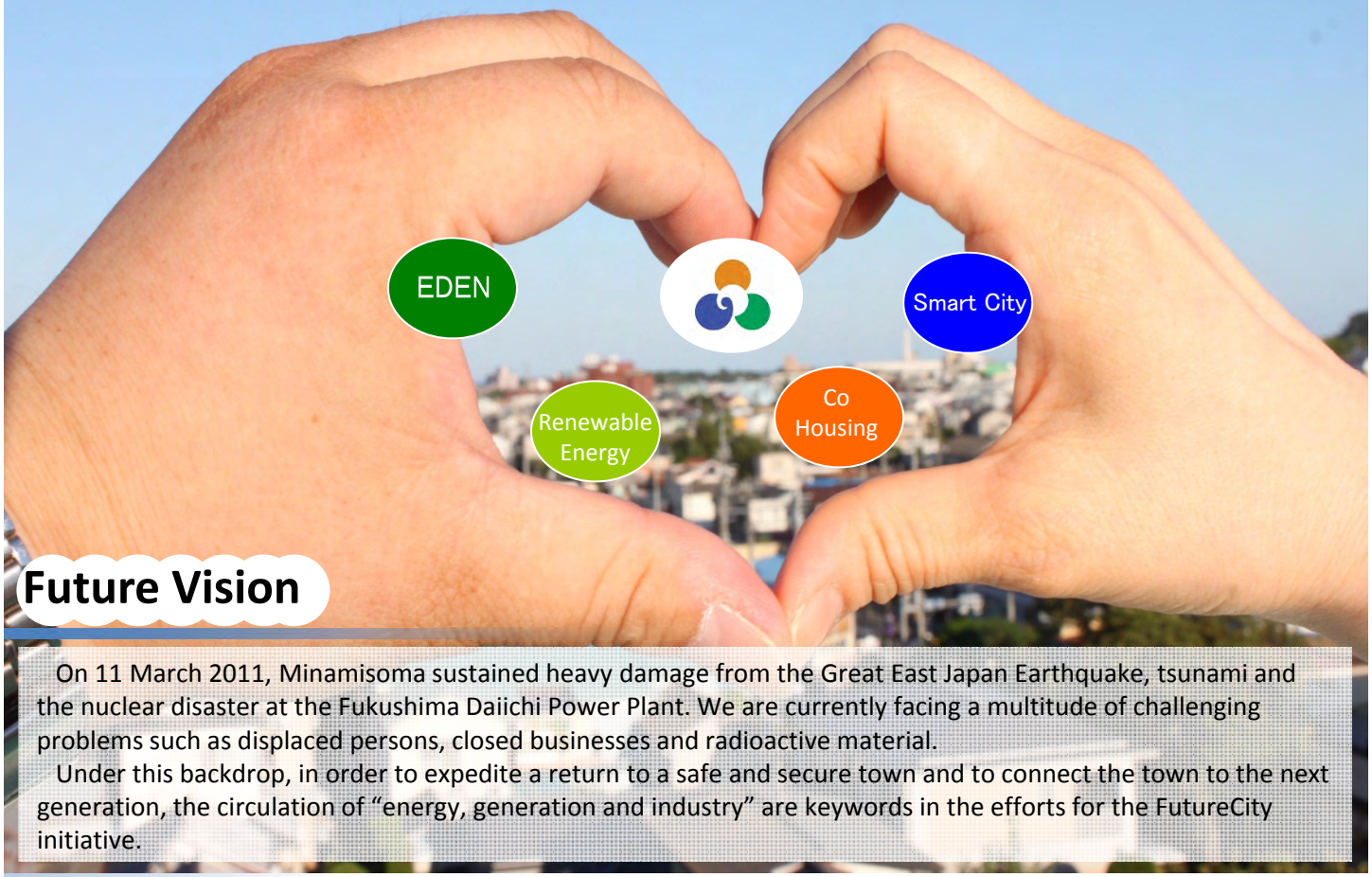
0 (2011) ⇒ 2,500 people (2016)



City of Minamisoma, Fukushima Prefecture

Area: 398.5㎢
Population: 46,000

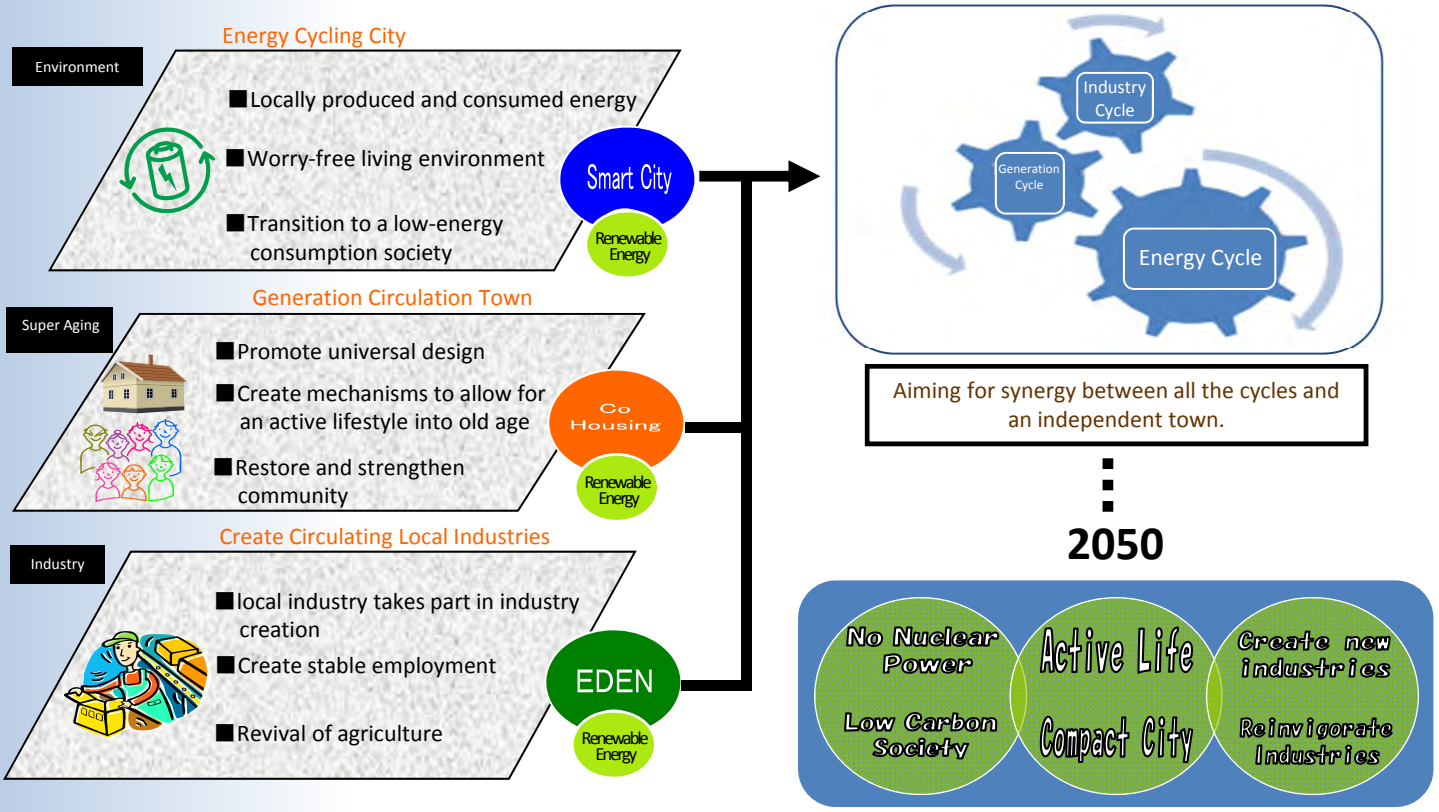
Recycling City Connecting to the Next Generation, Minamisoma



Future Vision

On 11 March 2011, Minamisoma sustained heavy damage from the Great East Japan Earthquake, tsunami and the nuclear disaster at the Fukushima Daiichi Power Plant. We are currently facing a multitude of challenging problems such as displaced persons, closed businesses and radioactive material.

Under this backdrop, in order to expedite a return to a safe and secure town and to connect the town to the next generation, the circulation of "energy, generation and industry" are keywords in the efforts for the FutureCity initiative.



Smart City

Energy Cycling City by Smart City

The below initiatives aim to achieve denuclearization and a low-carbon society

〇Construct and Operate a Renewable Energy Base

Install large-scale renewable energy bases in the mountains and the tsunami affected areas. Aim for local energy production for local consumption, reducing environmental impact and removing dependence on nuclear power.

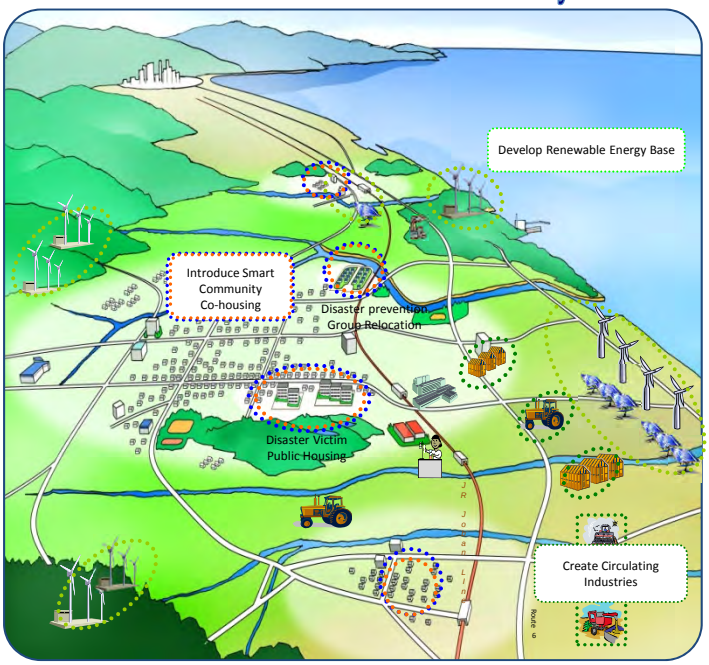
〇Create Communities Incorporating Solar Power and EV

Promote eco-friendly practices at the disaster prevention group relocation site, and increase energy-saving settlements in the city. Promote the installation of solar panels on each house, support settlements' energy-saving efforts through EV sharing.

〇Increase the environmental awareness of all citizens

To avoid suffering from a nuclear accident, provide opportunities to learn about power and the environment through education and symposia.

Future Plan for Minamisoma City



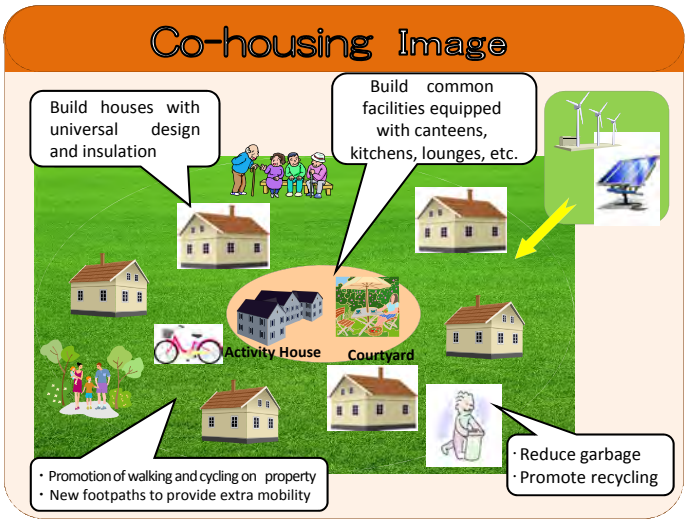
Co housing

Generation Circulating Town that is Comfortable for All

In conjunction with disaster prevention group relocation, in order to increase the Quality Of Life, we aim to incorporate the features of "co-housing," have lively community activities and allow for citizens to live long independent lives.

※ Co-housing
(About 30 households per community)
①Build residences using a universal design and super-insulated material
②Create common facilities, ensure a place for local exchange
③Utilize renewable energy and reduce environmental impact
④Reduce garbage, carry out recycling in the community

Co-housing Image

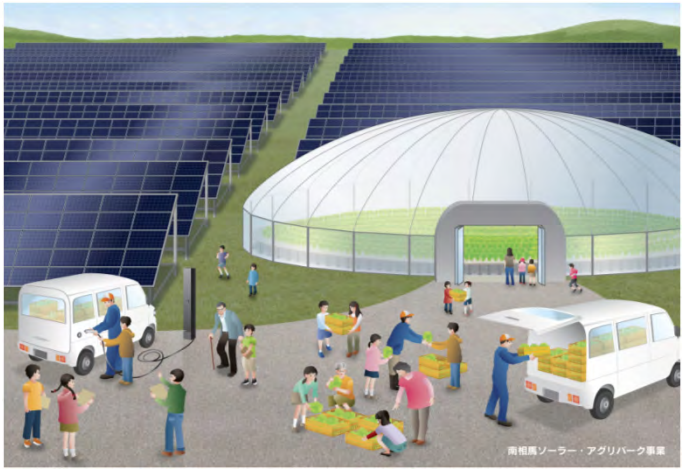


EDEN

Creation Material-cycling Local Industries Centered on the EDEN Plan

Pursue efforts to renew the local agriculture industry with the introduction of a new industrial structure that has primary industries at the core.

Implement a full-year of production and diversification of production items by reconstruction and consolidation of the farms, incorporation of farms, implementation of agricultural products with large-scale agriculture, and by consolidating plant factories and flower nurseries.



Shinchi Town, Fukushima

Area: 46.35㎢
Population: 8,022 (As of 12/2012)

Our Vision for the Future

As a vision of 2050, Shinchi aims to be a town where the local people and new residents and those that visit Shinchi can feel the spiritual affluence through the abundance of nature, rich life, and connections between people, and they can feel that they like Shinchi.

① A Value Shift Subsequent to the Damage Caused by the Great East Japan Earthquake

With a view to breaking dependence on nuclear power, we work to achieve Local Production for Local Consumption of energy through renewable energy sources, particularly woody biomass and solar energy, while striving to improve efficiency and reduce the environmental burden of existing power-generation technology.

② Sustainable Development of Regional Industry

We prioritize regional energy supply as a new regional industry. We also boost the brand value of our region and trust in our products—both overseas and in Japan—by applying cutting-edge manufacturing and energy-storing techniques to the region's primary industries (which are traditionally the region's largest), an initiative rooted in a background of extensive renewable energy in the region.

③ KIZUNA: Renewing Old Ties, Fostering New Ones

We are striving to foster our own special brand of KIZUNA, a Japanese concept that means the "ties between people." To do this, we are building: information and communications infrastructure ensuring that everyone can obtain the information they need to connect, anytime and anywhere; public transportation infrastructure; and human infrastructure for the people of the town, providing fine-tuned support and consultation services. Through the above, we also seek to build a diverse base of community business.

Major Quantifiable Objectives

- Renewable-energy based electric power output of the town: 0 kW (FY2011)⇒2,000 kW (FY2016))
- Energy self-sufficiency ratio of public facilities and private housing: less than 1% (FY2011)⇒30% (FY2016)
- Use of biomass energy: 0 (FY2011)⇒200,000 tons (FY2016)
- Cover ratio of the Smart Hybrid Network, a smart gird for Shinchi: 0% (FY2011)⇒10%(FY2016)
- Increased employment through new industry creation: 0 (FY 2011)⇒100 (FY2016)
- Total number of local mobility service users: 24,463 (FY2011)⇒ 50,000 (FY2016)
- Broadband service dissemination rate: 0%(FY2010)⇒50%(FY2016)
- Total number of volunteers: figures unavailable⇒100 (FY2016)

PROJECT 01 Local Production/Local Consumption of Energy

☐ **Installing solar power equipment with a view to Local Production/Local Consumption of Energy**

- Implement solar power projects/attract solar power businesses to the area
- Install solar power panels in public facilities
- Utilizesolar panels in new housing developments, etc.
- Implement environmental learning with a view to an ecological lifestyle

☐ **Adopting a diverse array of biomass energy to revitalize the region**

- Implement demonstration runs on biomass electricity/heat supply, etc.

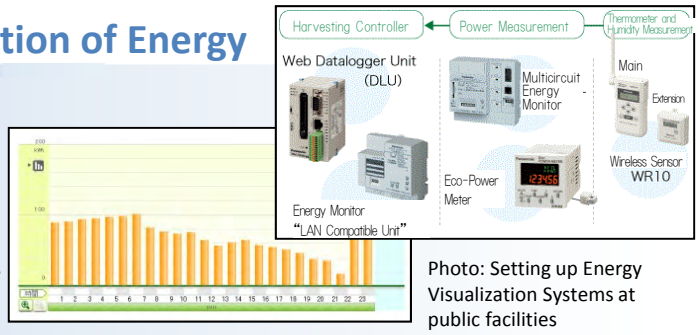


Photo: Setting up Energy Visualization Systems at public facilities

Photo: Solar panels installed in four Shinchi town elementary and junior high schools by the Coca-Cola Reconstruction Fund (August 2012)

PROJECT 02 New Industry Creation

☐ **Creating new industry by applying a wide range of renewable energies**

- Establish a vegetable plant using renewable energy
- Promote agricultural industries (encompassing primary, secondary, and tertiary sectors) through tourism offices
- Create new tourism industries by establishing soccer fields, accommodation facilities, etc.

☐ **Structuring a Smart Hybrid Network using regionally distributed/independent energy supply**

- Implement small-scale demonstration runs on smart grids
- Promote widespread use of electric vehicles and establish charging stations

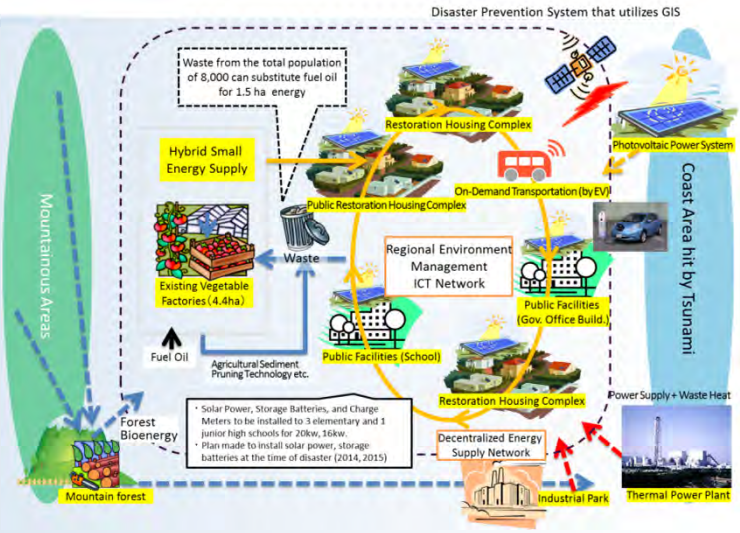


Figure: A sketch of the Smart Hybrid Network

PROJECT 03 Fostering KIZUNA (ties between people)

☐ **Structuring regional mobility systems for a significant elderly population**

- Secure transport in the area with a community transport system
- Re-structure and enhance transportation networks to link the town with neighboring areas
- Structure regional mobility in support of a more "compact town"

☐ **Providing an array of community services to improve elderly QOL**

- Establish sophisticated information and communications infrastructure that can be utilized by anyone, anytime
- Provide community services through a variety of channels (day-to-day assistance/neighborhood watch, etc.)

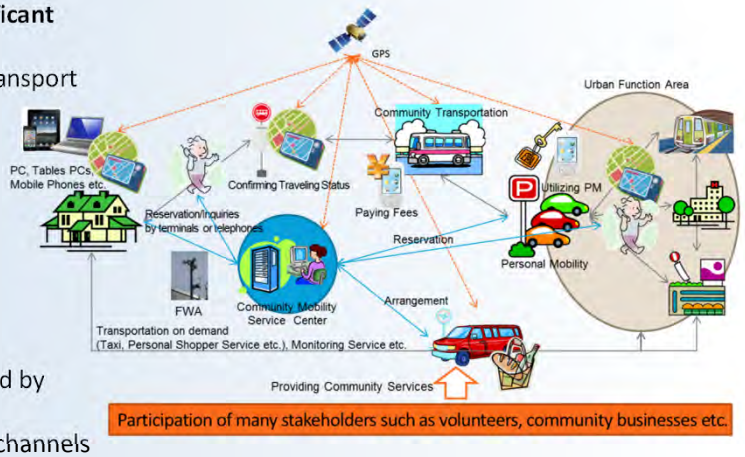


Figure: Support system for regional services involving diverse participants

Regional Revitalization Bureau
Cabinet Secretariat
Government of JAPAN

1-11-39,Nagatacho,Chiyoda-ku,Tokyo-JAPAN
TEL：+81-3-5510-2175 FAX：+81-3-3591-8801
E-mail：g.futurecity@cas.go.jp