

Forest Future City with people shining [Shimokawa Town, Hokkaido]

Overview of the city

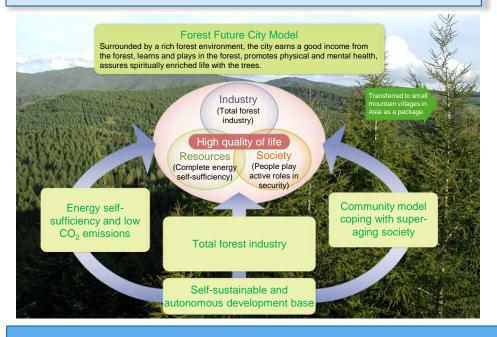
Population: 3,445 (as of Apr. 2015)

Area: 644.2 km²

Land use: 91% forest, 5.5% agricultural land

Main industries: Forestry, forest industry, agriculture

Vision



Roles of government, citizens, corporations and other organizations

Townspeople

(Future City promotion town meeting, public comments, briefing meetings)

Reflecting comments and opinions

Townspeople, experts (Shimokawa Board of Trustees)

Government

(Headquarters to promote the Future City)

Assess, advise and make corrections

Consensus building

<u>Promotion organization</u>

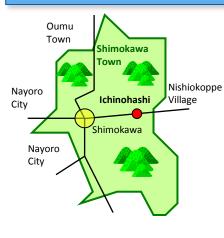
Government, townspeople, local and outside corporations

(Shimokawa promotion meeting)

Promotion of individual projects by various groups

Realize "Forest Future City" model

Overview of characteristic efforts





Depopulated, dilapidated

Energy cost increasing Deindustrialization

Collective housing Renewable energy and Community business **Building a new model**

Responses to super-aging and **Energy self-sufficiency** Reviving the neighborhood

Shimokawa Town, "Ichi-no-hashi" collective housing area supporting super-aging with energy self-sufficiency











- Modern, well-sealed, highly insulated row housing
- ▶ 100% self-sufficiency in thermal energy using wood biomass
- Create neighborhood industries such as a community restaurant, greenhouse cultivation, and development of innovative specialty products



Kashiwa Future City [Kashiwa City, Chiba]

Overview of the city Source: 2014 statistics

- Population: 408,198 Area: 114.74 km²
- Land use (top three): 31.51% residential land, 13.83% farmland for crops other than rice, 12.17% rice field
- Main industries (number of workers): Retail, healthcare and welfare, restaurant

Vision

Realize a city where everybody wants to live safely, securely and sustainably.



Roles of government, citizens, corporations and other organizations

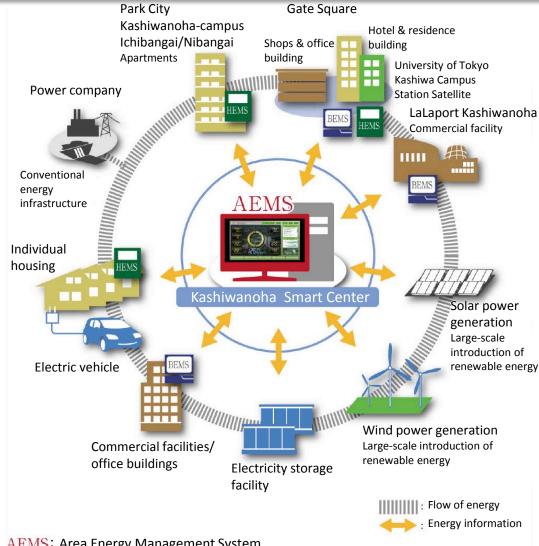
Kashiwa City aims to adopt a three-issue-solution model: Environmentally Friendliness, Health Longevity City, and New Industry Creative City. The universities designed and proposed a community where everybody can participate in community development. It is a community where citizens and corporations take responsibility to run sustainably and autonomously. Any community-minded person, whether old, young or a free-



Overview of characteristic efforts

AEMS (Area Energy Management System)/Smart Center

- In the urban area around Kashiwanohacampus Station of Tsukuba Express, the system to optimize the total energy usage has been introduced in July 2014.
- This system enables energy saving and low CO₂ emissions by peak shaving at normal times, and provides a safe and secure life to the community as well. It does this by supplying electricity to the infrastructure such as the elevators in high-rise apartments and the pumps to pull up underground water during a disaster or power outage.



AEMS: Area Energy Management System BEMS: Building Energy Management System **HEMS:** Home Energy Management System

Planning and Coordination Division, Planning Department, Kashiwa City **Contact** Tel: 04-7167-1117 E-mail: kikakuchosei@city.kashiwa.lg.jp



Yokohama FutureCity [City of Yokohama, Kanagawa]

Overview of the city

Population: 3.72 million (as of Aug. 1, 2015)

Area: 435 km²

• Land use: 81.3% urban usage (residential, commercial),

18.7% natural use (agricultural, forestry)

• Main industries: Service, real estate, wholesale, retail,

manufacturing

Vision

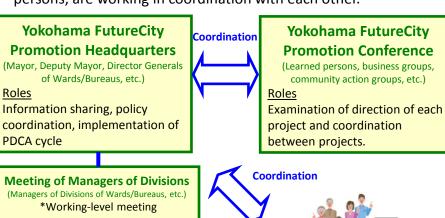


- 3. Creation of culture and arts, and growth industries, Functional business space
- 2. Low-carbon and uninterrupted network of energy, water and sewage services, and waste collection.
 - Seamless coordination between healthcare, nursing-care, welfare and child rearing.
- 1. Living space blessed with natural environment (water and greenery) and geographical features.

Roles of government, citizens, corporations and other organizations

Government leadership and discussion organizations

The Promotion Headquarters led by the Mayor and the Promotion Conference, composed of external knowledgeable persons, are working in coordination with each other.



Involvement of citizens to accelerate projects

Yokohama Eco School (opportunities for citizens to learn and act) events are held at many locations in the city.



Overview of characteristic efforts

Projects that takes advantage of characteristics of the coastal urban area and suburban areas

Yokohama Area

Suburban areas

Diverse parties such as the local community, private business, government and university are working in coordination to solve local issues such as supporting elderly people and child rearing, and to create a sustainable and attractive town planning model.



(around Izumino Station, Sotetsu Line)



Next Generation Suburban City Planning Forum (Tama-Plaza)



10 other projects are in progress in the city, leveraging the characteristics of each area.

Coastal urban area

The Minato Mirai 2050 Project Action Plan was established in March 2015 to promote advanced town planning in the Minato Mirai 21 area, and to showcase environmental solutions for areas in Japan and overseas.





Smart Illumination Yokohama 2014



Delivering and deploying town planning know-how in Yokohama to Japan and overseas



Toyama Future City [Toyama City, Toyama]

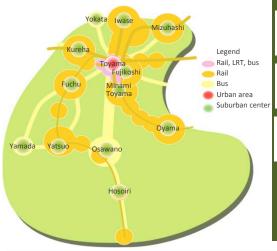
Overview of the city

- Population: 421,953 (2010 census)
- Area: 1,241.77 km² (incl. 863.48 km² forest area)
- Main industries: manufacturing industry
- Characteristics: The city has a rich natural environment with diverse geographical features, an elevations going from sea level in Toyama Bay to Mt. Suisho rising as high as 2,986 m.

Vision

The target concept of "dumplings and skewers" urban structure sought by Toyama City

Skewer: Public transportation above a certain service level Dumpling: Walking sphere connected by the skewers

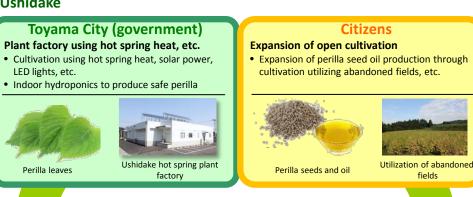


- 1. Compact city planning based on public transportation
- 2. Quality and attractive life of community
- 3. Industrial development leveraging local characteristics

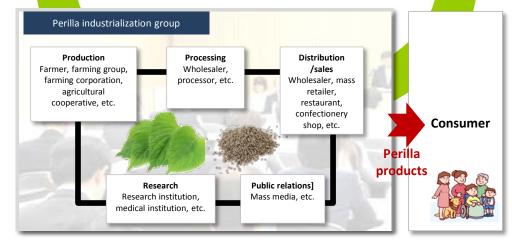
Realization of sustainable city

Roles of government, citizens, corporations and other organizations

High-value-added agriculture project using hot spring heat from **Ushidake**



Integrated management (production, processing, distribution/sales) of the project



Overview of characteristic efforts



Development of LRT Network

In order to realize the compact city plan based on public transportation, we have introduced the LRT to the former JR Toyama Port Line, and constructed a loop line for the city tram. Additionally, we have been working on developing the LRT network that has a length of 25.3 km in total by connecting the northern and southern tram services under the elevated railway of Toyama Station, and extending the city tram service into the Kamidaki Line (railway) of Toyama Regional Railway.

With the introduction of the LRT to the former JR Toyama Port Line and the loop line of the city tram, we have achieved:

- Major increase in number of passengers
- Reduction of greenhouse gas emissions
- Creation of outing opportunities for elderly people
- Increase of new house constructions along the route
- Increase of visitors to the sightseeing facilities along the route,



Diverse local revitalization effects are seen.

Contact

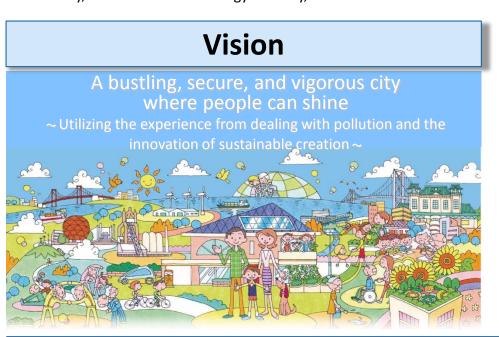
Environmental Policy Division, Environmental Department, Toyama City Tel.: 076-443-2053 Fax: 076-443-2122 E-mail: kankyousei-01@city.toyama.lg.jp



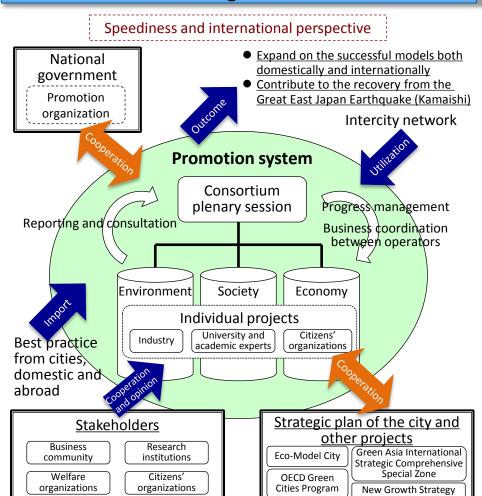
Kitakyushu Future City [City of Kitakyushu, Fukuoka]

Overview of the city

- Population: 959,000 (as of Aug. 1, 2015)
- Area: 491.95 km² (as of Oct. 1, 2014)
- Land use: Forest (42.7%), residential land (14.0%), industrial land (7.0%), agricultural land (6.0%), commercial land (3.2%) (as of March, 2011)
- Main industries: Manufacturing industry, core manufacturing industry, automotive industry, electric components and devices industry, environment and energy industry, etc.



Roles of government, citizens, corporations and other organizations



Overview of characteristic efforts

Japan-China's joint project in responding to air pollution and energy-saving



Nine Japanese cities are cooperating with Chinese cities to improve air quality. Kitakyushu is the only city that works together with multiple Chinese cities.



Solution to regional issues with integral and transversal approaches as a Future City.

Transversal solutions for multiple issues

Solutions provided through lateral cooperation between local community, NPO, corporation, etc.



Formation of new frameworks that support local communities







Kesen region Future City

[Ofunato City, Rikuzentakata City, Sumita Town, Iwate]

Overview of the region

• Population: 64,742 (as of the end of July 2015)

Area: 890 km²

• Feature: Kesen region is consists from coastal Ofunato and Rikuzentakata cities and Sumita Town known for its forestry, they have been cooperating with each other throughout the ages. After the Great East Japan Earthquake, various projects for creative restoration from the unprecedented damage are well underway in Ofunato and Rikuzentakata.

Vision

Vision of Kesen region Future City

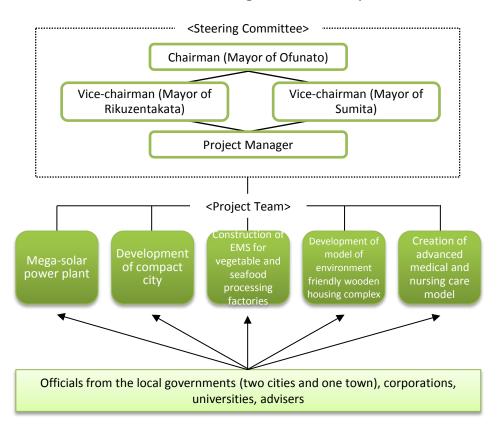
Build a society with locally produced and locally consumed energy

Promote community development in response to the super-aging society where everyone can live comfortably

Promote industrial development and social infrastructure

Roles of government, citizens, corporations and other organizations

Structure of the Kesen region Future City Consortium



Overview of characteristic efforts

Creation of advanced collaboration model for medial and nursing care, etc.

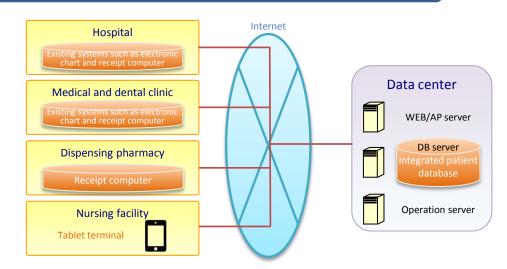
Kesen region Future City
Joint Council for Medical, Nursing,
Health and Welfare
(Established in August 2012)

Composed of medical, nursing, health and welfare personnel and advisers in the Kesen region, the council has examined issues such as collaboration between medical and nursing services, etc. in response to the super-aging society.

A General Incorporated Association,
Mirai Kanae Institution
(Established in April 2015)

Upon commercializing the themes examined in the Joint Council, the private organization has been transformed into a General Incorporated Association to enhance the system and to obtain the trust of society.

- ♦ Business description of Mirai Kanae Institution
- Introduction of local medial information network system
- Enhancement activities of local nursing services
- Other businesses necessary to cope with the super-aging society



Conceptual diagram of the local medical information network system



General Incorporated Association Mirai Kanae Institution establishment party (April 2015)



An ICT introduction review meeting attended by experts from the medical, nursing, health and welfare areas

Contact



Kamaishi Future City [Kamaishi City, Iwate]

Overview of the city

Population: 36,013 (as of the end of July 2015)

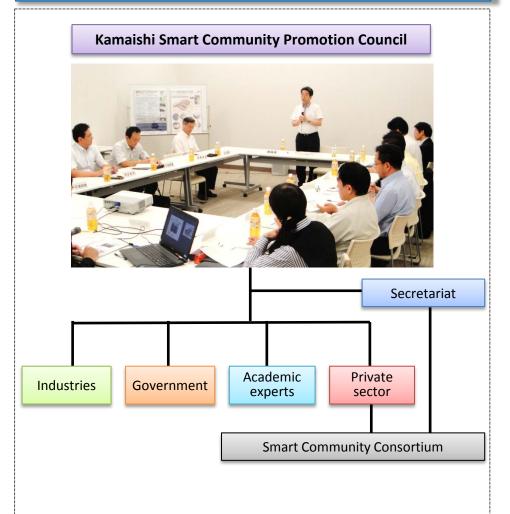
•Area: 440.34 km²

•Land use: 89.2% forest area

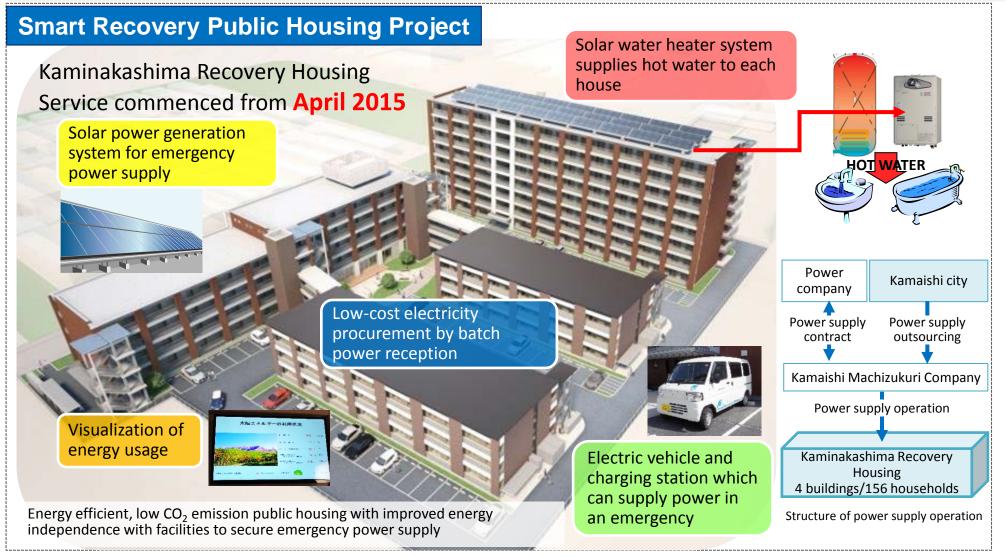
• Main industries: Machinery manufacturing, fishery

Vision Life with job Exchange of Rich environment and Kamaishi in 2050 people, goods and information opportunities and well-being Kamaishi **Future City Initiative** A recycling society A city which values mutual A networking city which is energy and assistance and provides where people and resource efficient with individuals with fulfilling communities link low carbon emission A City of Hope and Smiles that shines across the Sanriku Region 2011.3 Great Key industry restructuring Earthquake 1933 Sanriku earthquake

Roles of government, citizens, corporations and other organizations



Overview of characteristic efforts







Iwanuma Future City [Iwanuma City, Miyagi]

Overview of the city

Population: 44,200
 Area: 60.45 km²

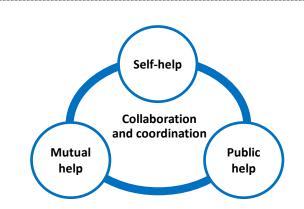
• Land use: 31.2% agricultural land, 33.2% wilderness, 18.6% mountain and forest, 17.0% residential land

• Main industries: Manufacturing, logistics, agriculture

Vision



Roles of government, citizens, corporations and other organizations





Participation and cooperation to reconstruction events

(Tree-planting event at the Revetments, "Sennen kibono oka," May 30, 2015)

Overview of characteristic efforts





The first collective disaster-prevention relocation carried out at the initiative of the community residents

(Opening of community, July 2015)





Mega solar plant built on former agricultural land that is unrecoverable due to subsidence, etc.



Higashimatsushima Future City [Higashimatsushima City, Miyagi]

Overview of the city

Population: 40,138 (as of Apr. 1, 2015)

Area: 101.86 km²

Land use: 24% agricultural land, 31% forest, 16% roads and

residential land

Main industries: Fishery, agriculture

Vision



Roles of government, citizens, corporations and other organizations

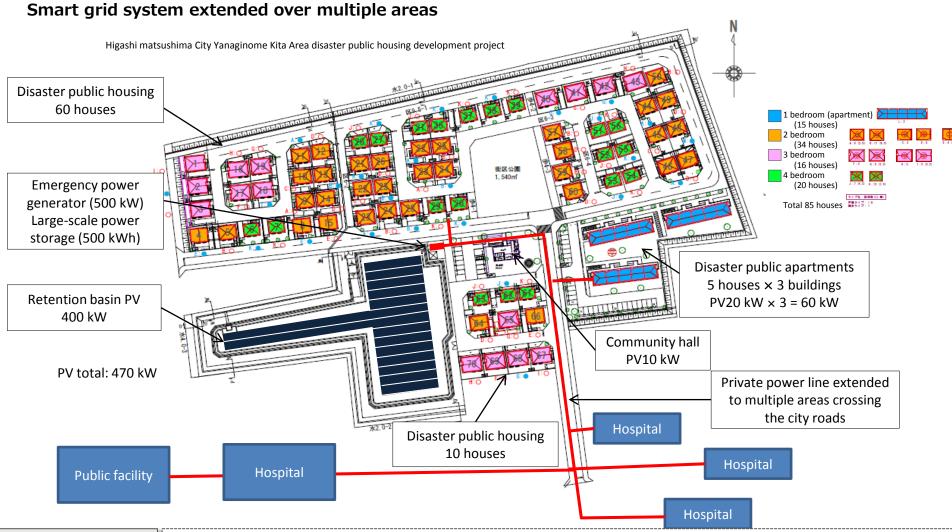
Located 30 km northeast of Sendai, the central city of the Tohoku region, Higashimatsushima is a scenic city that occupies a part of Matsushima, one of the Three Views of Japan. The population as of March 1, 2011 was 43,142. The major industries were cultivation of seaweed and oyster, and agriculture. As the city is located in between Sendai and Ishinomaki, the number of households was increasing as a commuter town.

The city was seriously damaged by the Great East Japan Earthquake, with more than 1,100 people dead or missing. The vision for Future City is identical to its "City Reconstruction Plan." With the motto of "Higashi matsushima isshin (this word has a triple meaning: one heart, taking a step forward and renewal)," the city is working hard to recover from the disaster and to create a sustainable society with the principle of citizen collaboration.

Overview of characteristic efforts

Higashimatsushima Smart Disaster Prevention Eco-town with special power supply Power Management System Construction Project

(Ministry of the Environment: Autonomous/Distributed Low-carbon Energy Society Promotion Project)



Contact

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Minamisoma Future City [Minamisoma City, Fukushima]

Overview of the city

• Population: 63,179 (as of Aug. 1, 2015)

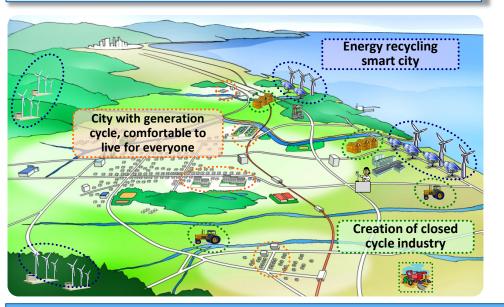
Area: 398.50 km²

• Land use: 17% rice fields, 7% other crops, 5% residential land, 43% forest, 28% other

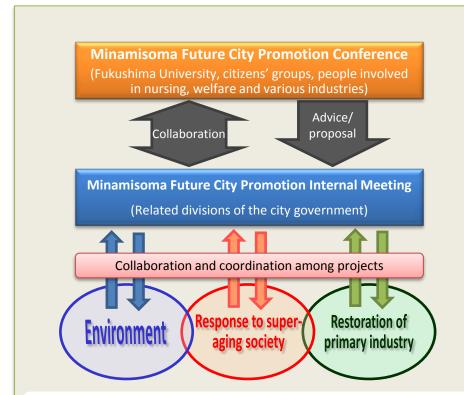
Main industries: Agriculture, metal processing industry,

etc.

Vision



Roles of government, citizens, corporations and other organizations



The "Minamisoma Future City Promotion Conference," composed of knowledgeable persons, gives advice and makes proposals to the city government. The "Minamisoma Future City Promotion Internal Meeting" established within the city government seeks close collaboration and coordination among various projects to keep each project running smoothly.

Overview of characteristic efforts

Minamisoma Solar Agri-Park project

Solar power plant

Dome-type plant factory



Fukushima Restoration Solar/Agriculture

produces a solar power plant hands-on

learning program in collaboration with

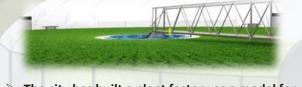
Experience Exchange Association plans and

Support children's growth through learning

by experience in a solar power plant and



- Fukushima Restoration Solar, Inc. has built and is operating the 500-kW-class photovoltaic power plant.
- Part of the generated power is supplied to the plant factory.
- Revenue from the sold power is used for growth support projects for children.



- The city has built a plant factory as a model for reviving agriculture.
- A local agricultural product company manages and operates the facility.
- Use electricity from the solar power plant to run irrigation pumps and air conditioning.

Accumulation of exchanges and media coverage

Overcome the harmful rumors

Restoration of Fukushima and Minamisoma



KidZania.

plant factory.

Job creation through industry revival

Revive agriculture, industry and tourism

New Energy Promotion Division, Reconstruction Planning Department, Minamisoma City



Shinchi Future City [Shinchi Town, Fukushima]

Overview of the city

• Population: 8,021 (as of Sept. 1, 2015)

Area: 46.35 km²

• Land use: 28.5% agricultural land, 35.9% forest, 7.3% road, 12.9% residential land, 15.4% other

 Main industries: Agriculture; electricity, gas and heat supply; water

Vision

"Of Course, Shinchi is always best for us"

— A town where you can see the future and hope for the environment and life

A town where people have pride and love for the community

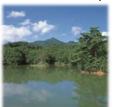
A town of the sea in harmony with nature

A town of energy locally produced and locally consumed

 A town that creates industries to utilize various local resources

 A town where people can learn at any age and live with a sense of purpose in life

A town where people nurture human bonds



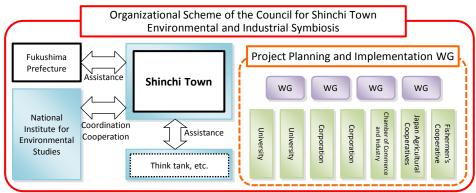




Interactive roles of government, citizens, corporations and other organizations

Shinchi Town's recovery aiming for environmental and industrial symbiosis with society

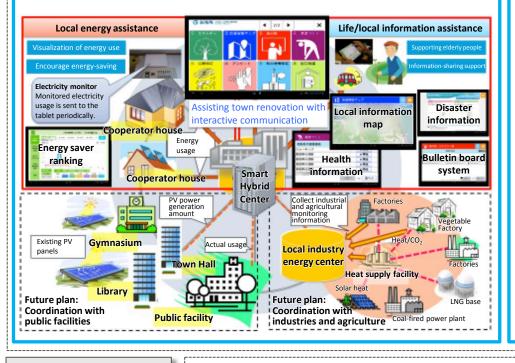
Aiming for a town where living in an industrial symbiosis with people and environment, we have established network for industry-academia- government collaboration and created platforms to exchange information about ecoindustry and eco-city. We promote town planning aiming for environmental and industrial symbiosis, the key to reconstruction and regional revitalization of the town, through: research on utilization and business incubation local energy resources; research to realize living in a sustainable eco-city; and invitation of energy related industries that link to the Innovation Coast Plan.



Overview of characteristic efforts

Shinchi Town Smart Hybrid Network Plan

In coordination with ongoing infrastructure reconstruction projects, we are developing an ICT network to address issues about the environment, declining birthrate and aging population. We promote a community demonstration project as a recovery model that enhances the values of the environment, society and economy. By developing the interactive Shinchi Town Smart Hybrid Network that supports the local energy and aging community, we promote sharing of information on daily life and recovery, in order to encourage energy-saving conducts and assist recovery of people's life including support for elderly people.



Town planning around the station and local energy project

An urban zone reconstruction project is under way in an area of about 24 ha around JR Shinchi Station which had been destroyed by the tsunami of the Great East Japan Earthquake. At the same time, the possibility of natural gas usage in the area is expanding because of the Soma Port LNG Project. We are investigating local energy business opportunities together with town planning around the station, in order to realize co-existence between the environment and industry.

With the natural gas branched from the pipeline to be installed on the east side of the station area, we are aiming for commercialization of an autonomous and distributed local energy system by a co-generation system that supplies heat and electricity to nearby facilities, as well as by a trigeneration system to supply CO₂ to the agricultural production facilities.



Contact

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