「環境未来都市」構想
"FutureCity" Initiative

Obihiro City, Hokkaido
(Eco-Model City)

About Obihiro City

- Population: 167,560 (as of end of March 2017)
- Area: 619.34 km^2
- Blessed with abundant of nature, Obihiro is an harmonious city of urban and rural communities. Obihiro is the only place in the world where draft-horse racing (Ban'ei horse racing) can be seen.

CO_2 Reduction Goal

Emissions in 2000 (base year)
1,459,517t-CO_2

Reduce CO_2 emissions by 15% or more by FY2018

Reduce CO_2 emissions by 30% or more by FY2030

Reduce CO_2 emissions by 50% or more by FY2050

Ensure compatibility between the environment and economy by transforming lifestyles, making use of renewable energy, etc.

Environmental Education Programs Unique to Obihiro

To pass the society where people and the nature live together to the next generation…

develop the "persons who practice from what can be done now"

(1) Link "experience," "understanding" and "practice" spirally.
(2) Create initiatives utilizing regional resources such as rich nature.
(3) Value independent learning of children.

→ Three perspectives unique to Obihiro

Total 33 programs which can be freely combined with

"Nature observation" learning

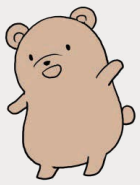
"Global warming issue" learning

"Waste and recycle" learning

"Agricultural experience" learning

• These programs aim to grow children into the "persons who practice from what can be done now" for environment. Under linkage among schools, families, regions, the government and other parties, environmental education unique to Obihiro has been provided.

Certification of schools carrying out environment-friendly activities



"Jagakuma-kun" Character designed in the image of children in Obihiro

Contact Environmental City Promotion Division, Citizens Environment Department, Obihiro City (Attn: Tanaka)
Tel: 0155-65-4135 Fax: 0155-23-0161 e-mail: environment@city.obihiro.hokkaido.jp

「環境未来都市」構想
"FutureCity" Initiative

Chiyoda City, Tokyo
(Eco-Model City)

About Chiyoda City

- Population: 60,297
- Area: 11.66 km^2

Chiyoda ward is not only a political and economic center but also has beautiful natural surroundings around the Imperial Palace.

Eco-Model City Action Plan
(Action Plan as a demonstration city)

The Three Pillars of Promoting of Action Plan

- ☑ Higher level of energy-saving measures in building
- ☑ Two-dimensional measures leveraging opportunities and places for community planning
- ☑ Regional collaboration

Chiyoda City Buildings Environmental Plan System (revised in October 2016)

Objective:	To encourage further energy-saving measures in constructing new buildings.
Coverage:	Building projects with total floor space of 300 m^2 or more.
Details:	The city and the enterprise discuss energy-saving measures before the plans of construction are finalized.
Target:	To target 35% reduction more than the standard value established in the Building Energy Conservation Act.
Evaluation:	35% reduction for “superior eco-buildings” and 20% reduction for “good eco-buildings”
Results:	3 cases which achieve 35% reduction and 23 cases which achieve 20% reduction (from October 2016 to June 2017, the number of submissions: 46)

Chiyoda city evaluates energy-saving buildings!

Contact Environmental Policies Division, Environment and Urban Development Dept. Chiyoda City (Attn: Nakazawa/Ochiai)
Tel: 03-5211-4255 Fax: 03-3264-8956 e-mail: kankyouseisaku@city.chiyoda.lg.jp

「環境未来都市」構想
"FutureCity" Initiative

Iida City, Nagano
(Eco-Model City)

About Iida City

- Population: 103,023 (as of Mar. 31, 2017)
- Area: 658.66 km^2 (84% forest)
- Hours of sunlight per year: 2116.5 hours (2016)
- Solar power take-up rate: 8.9% (The end of FY 2016)


Specialty of Minami Shinshu, "Ichidagaki" (dry persimmons)


Iida is a city of the best grilled meat restaurants in Japan. (5.31 restaurants per 10,000 population)

Iida Future Design 2028

Iida Future Design 2028 (Iida City Comprehensive Plan)

Policies to take on the challenge of creating the future of Iida City toward realizing the regional vision in cooperation with the city's residents, local communities, businesses, organizations, NPOs, and government

Ideal city image we hope to achieve

A city where we can enjoy our lifestyles,
A city where we can live peacefully and safely due to close relationships among residents,
A city where we can enjoy healthy and active lives,
A city which nurtures a zest for life and culture by mutual learning,
A city where we can enjoy the happiness of raising children with the help of community support,
An eco city where people and nature can coexist,
A sustainable and self-sufficient city, and
A city where its 20 areas have their attractive individual characteristics with their pride and affection

Residents | Communities | Businesses | Government

City development through
"a sense of ownership" and "co-creation"

Iida's Eco-Model City Initiatives

Community-led Renewable Energy Projects Under the Regional Environmental Rights Ordinance

*An ordinance concerning sustainable community building through the introduction of Iida's renewable energy

Nine community-led solar power generation projects are being operated with the support of the Regional Environmental Rights Ordinance. Profits from electricity sales is used for initiatives for solving community issues that local residents are actively working on.

*The photo is of the school solar power generation project by junior high school students.


Junior high school students explaining project in the community *

Consensus formation about the project in a community

Companies, etc. with the know-how

Cooperation for power generation projects, etc.

Community organizations which reflect the intentions of local residents

Project entity

Support
Advice
Credit

Financing

Iida City

Local financial institutions

Multifaceted ripple effect


Promoting use of renewable energy


Enhancing disaster-preparedness function


Stimulating regional activities


Promoting environmental education


Public reinvestment of profits


Public-private partnership

Activities of Region-Wide Environmental ISO Study Group which marks its 20th anniversary

Environmental management system (EMS) initiatives and studies in the Minami-Shinshu region, with Iida City at its center, are being developed by private-sector companies, which carry out activities as "Region-Wide Environmental ISO Study Group."
Fifty organizations have joined the original EMS of the Region, "Minami-Shinshu EMS21" developed by this study group.
Energy saving is being promoted on a "region-wide scale" by expanding activities to reduce the environmental impacts on the environment which are conducted in industry throughout the region.


Energy saving checks among companies of different industries (Iikosu Iida Project)

Region-Wide Environmental ISO Study Group which marks its 20th anniversary

Contact Regional Energy Planning, Eco-Model City Promotion Division, Citizens Collaborative Environment Department, Iida City (Attn: Ogawa)
Tel: 0265-22-4511 (ext. 5473) Fax: 0265-22-4673 e-mail: sakugen_co2@city.iida.lg.jp

「環境未来都市」構想
"FutureCity" Initiative

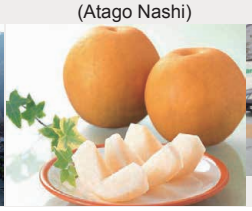
Toyota City, Aichi
(Eco-Model City)

About Toyota City

- Population: Approx. 423,916 (as of April 1, 2017)
- Area: 918.32 km² (70% of city area is forest)
- Main industries: Automotive, agriculture
- Value of manufactured goods shipped, etc.: 13.837 trillion yen (2014)

Korankei Valley, a famous spot for autumn

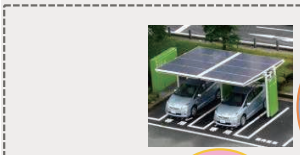
Jumbo Nashi Pear (Atago Nashi)



Motor vehicles (FCV, etc.)

2nd Eco-Model City Action Plan

Hybrid City Toyota Plan



Transport
● Construction of human-friendly and environmentally friendly public transport systems, etc.

Industry
● Promotion of transition to sustainable plants, etc.

HYBRID
[CO_2 Reduction Targets]
30% by 2030
50% by 2050

Forests
● Maximization of CO_2 absorption through enhanced thinning programs, etc.

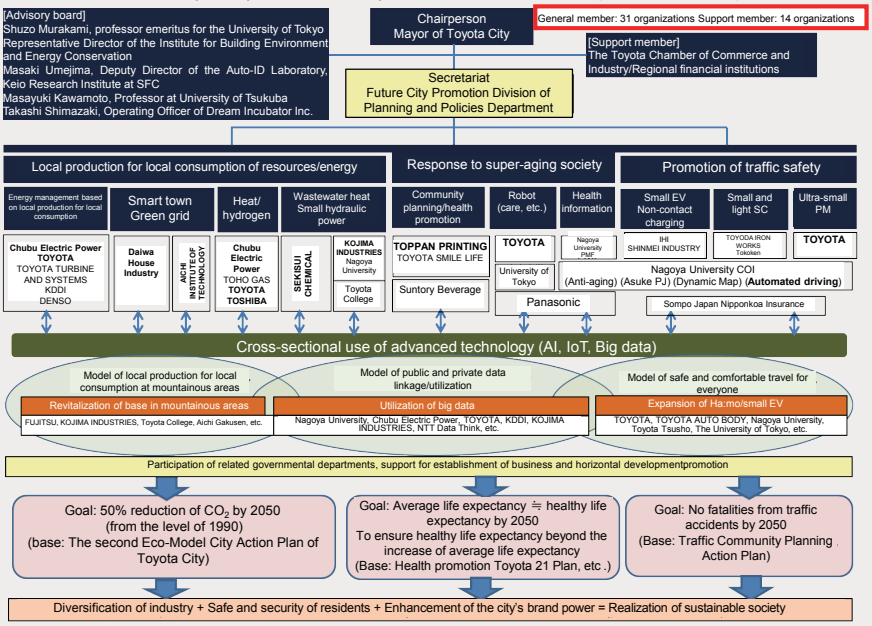
Residential
● Promotion of smart housing, etc.

Urban Center
● Construction of low-carbon society model districts, etc.

Toyota City Connected Society Verification Promotion Council

IoT Acceleration Toyota city Lab

Structure of the Toyota City Connected Society Verification Promotion Council (as of June 23, 2017)



"Purpose of establishment"

Through resolution of reginal issues by verification/implementation of advanced technology such as new energy, AI and IoT, improve safety and security of civilian life, promote creation of new industries and industrial diversification, and enhance attractiveness of advanced demonstration city in order to contribute to formation of sustainable society for Toyota City, Japan and foreign countries.

"Positioning of Council"

In addition to positioning as a community council in Comprehensive Special Zone for Local Revitalization and the main body for promotion of regional revitalization, the council is positioned as the "lab to promote local IoT" encouraging local companies to set up IoT introduction projects.

"Activity theme and goal attained by 2050"

(1) Local production for local consumption of resource/energy

=>CO_2 50% reduction (from the level of 1990)

<Smart Town>

Member group: Daiwa House Industry, Toyota City

Outline: Optimized energy use in the town with smart houses of all households

(2) Response to super-aging society

=> Average life expectancy ≒ healthy life expectancy

<Asuke Project>

Member group: Nagoya University, Institute of Innovation for Future Society, Toyota City

Outline: Improvement of mobility, promotion of outing, improvement of QOL and community sustainability by maintaining health in mountainous areas

(3) Promotion of traffic safety

=> No fatalities from traffic accidents

<Transportation society dynamic map>

Member group: Nagoya University, Institute of Innovation for Future Society, Toyota City

Outline: Watching over children, promotion of traffic safety, improvement of convenient public transportation service by integrated service with the core of the dynamic map

Contact Advanced City Promotion Division, Planning Department, Toyota City (Attn: Mizutani)
Tel: 0565-34-6982 Fax: 0565-34-2192 e-mail: hybrid-city@city.toyota.aichi.jp

「環境未来都市」構想
"FutureCity" Initiative

Kyoto City, Kyoto
(Eco-Model City)

About Kyoto City

Population: Approx. 1,470,000　Area: 827.9 km^2


Parade of decorated floats at Gion Festival


Traditional performance in Hanamachi


Autumn colors at Kkiyomizudera Temple


Japanese cuisine of Kyoto

Kyoto, a low-carbon city co-existing with the environment

GHG Reduction Targets

2020: 25% reduction (compared to 1990)
2030: 40% reduction (compared to 1990)

Kyoto's Six Visions of a society for the Future

Vision of a society 1: An enjoyable walking city that gives priority to people and public transport
Vision of a society 2: Forest regeneration and giving important value to "culture of wood" city
Vision of a society 3: City of energy creation and Community recycling
Vision of a society 4: Environmentally-friendly lifestyles
Vision of a society 5: Environmentally-friendly economic activities
Vision of a society 6: Garbage reduction

Promotion of shift to environmentally-friendly life style and community planning

With the keyword, "DO YOU KYOTO ?" meaning, "Do you do something good for environment?", we are promoting shift to environmentally-friendly lifestyle and community planning. In addition, we are also transmitting our model measures against global warming and promoting efforts through cooperation with local governments around the world.

Anniversary of the Kyoto Protocol: Kyoto Conference on the Global Environment 2017 "KYOTO+20"

Since year 2017 is the Kyoto Protocol' s twentieth anniversary and commemorative year to start steps of the Paris Agreement, we will host Kyoto Conference on the Global Environment 2017 (KYOTO+20).

Twentieth anniversary logo mark

"Pedestrian-Friendly City" by putting priority on pedestrians and public transportation.

We are seeking to make Kyoto a "Pedestrian-Friendly City" by improving public transportation comfort and convenience, developing a city that is even more fun to explore on foot, and offering a lifestyle that incorporates the joy of walking.


Widened Shijo Dori Street

Experience-based learning of hydrogen energy

We have implemented an experience-based learning of hydrogen energy. In this project, people learn about mechanism of Smart Hydrogen Station(SHS), which produce hydrogen from renewable energy and FCVs, and ride on FCV on trial.


Experience-based learning of hydrogen energy

Children's eco-life challenge

We have implemented "Children's eco-life challenge" at all public elementary schools. In this project, children take a class about environment and practice environmentally-friendly life with their family ,using an "environment housekeeping book" for children.


Class at school

Contact Eco-Model City Group, Global Environment Policy Office, Environment Policy Bureau, Kyoto City (Attn: Hara/Tashiro)
Tel: 075-222-4555　Fax: 075-211-9286　e-mail: ge@city.kyoto.lg.jp

「環境未来都市」構想
"FutureCity" Initiative

Sakai City, Osaka
(Eco-Model City)

About Sakai City

- Population: Approx. 840,000 • Area: 149.82 km^2

(Major attractions, etc.)

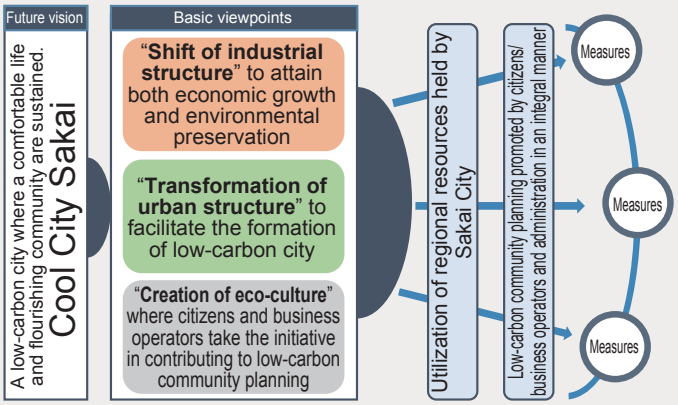
Nintoku-tenno-ryo Kofun, one of the world's largest ancient burial mounds.

"Sakai Risho no Mori," a museum introducing Sen no Rikyu and Yosano Akiko.

Sakai Knives, prized by professional chefs for their outstanding sharpness.

Sakai City Implementation Plan for Global Warming (Regional measures version) <Eco-Model City Action Plan>

Proceed with initiatives from three perspectives, to realize "Cool City, Sakai," a city of continued sustainable growth.



Project for combined utilization of recycled sewage water

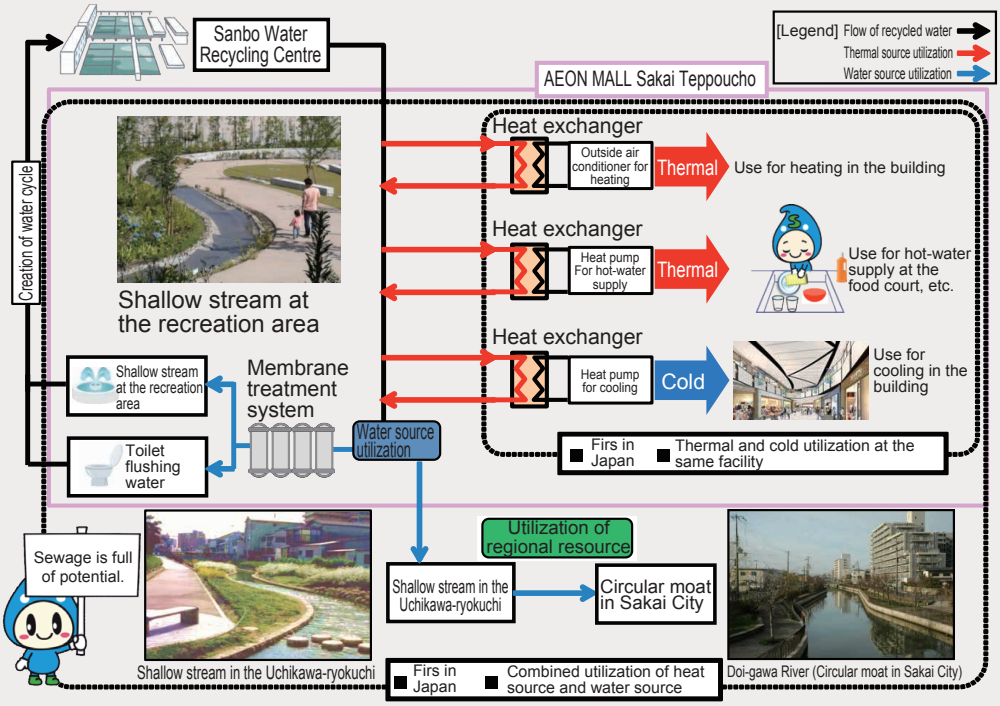
Japan's first initiative of combined utilization of recycled sewage water for thermal source of hot-water supply/air conditioning as well as toilet flushing water, water for shallow stream through cooperation with commercial facilities in the city.

Appearance of thermal source utilization system in the AEON MALL Sakai Teppoucho

Approx. 1,500m^3 of recycled sewage water per day is supplied to the AEON MALL Sakai Teppoucho which is approx. 2.3km away from the Sanbo Water Recycling Center.

Recycled sewage water whose temperature is approx. 15 degrees in winter and 25 degrees in summer can be used as thermal source by utilizing temperature difference from the outside air. After lowering water temperature in the use of thermal source for hot-water supply in the facility, the water is used as thermal source for air conditioning at multiple stages, by which energy saving and CO_2 reduction effect are expected.

After thermal use, the recycled water is used as water source for toilet flushing water and shallow stream in the facility as well as water source for shallow stream of the Uchikawa-ryokuchi outside the facility.



Contact Environmental Energy Division, Environmental City Promotion Department, Environment Bureau, Sakai City (Attn: Sumihara/Okumura)
Tel: 072-228-7548 Fax: 072-228-7063 e-mail: kanene@city.sakai.lg.jp

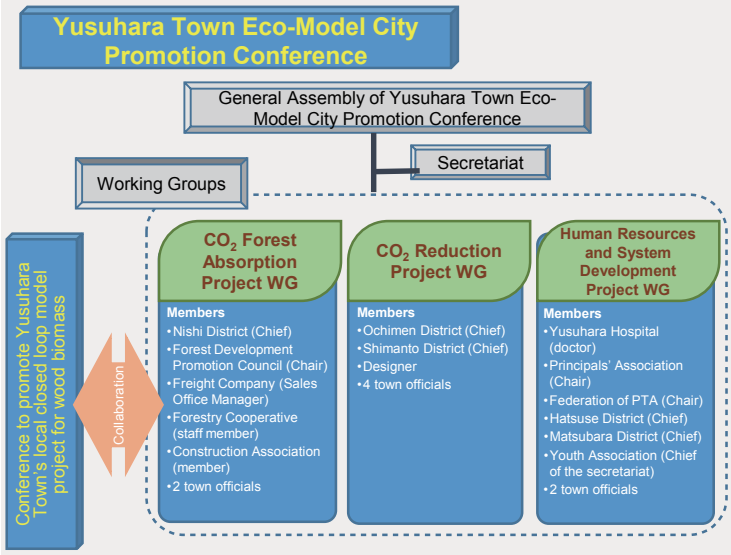
「環境未来都市」構想
"FutureCity" Initiative

Yusuhara Town, Kochi
(Eco-Model City)

About Yusuhara Town

- Population: 3,619 (at the end of March, 2017)
- Area: 236.51 km^2
- Land use ratio: Forest 91%, Rice field 0.7%, Field 0.6%
- Main industries: Forestry, construction industry

Roles of government, citizens, corporations and other organizations



Overview of distinctive initiative

Best mix of renewable energy sources and two kinds of closed loop

Solar
Subsidy of ¥200,000/kW (upper limits apply) for solar power equipment
Revenue from selling surplus power
→ House installation rate: Approx. 7.8%

Wind
Wind power generation facility 600 kW x 2 units
→ Revenue from selling surplus power ¥48.06 million/year (3-year average usage rate: 31.5%)

Forest (biomass)
Subsidies of ¥100,000/ha granted to forest owners who practiced forest thinning. (Program ended in FY2010)
Revenue from selling surplus power
Thinning
FY2014 Subsidies for logs: 2,000 yen/m^3 (¥4,000 from FY2015)
Subsidies for pellets: 2,400 yen/t (¥4,800 from FY2015)
Pellet factory in town
→ Area of implementation: 6,900 ha (FY2001 to FY2014)

Subsidies of 1/4 of cost for installation of pellet stove (upper limits apply)
Pellet stove
→ Number of pellet stoves installed: 10 units

Geo-thermal
By compressing the geothermal heat with a heat pump, the municipal heated pool is supplied with energy equivalent to 230 kW.
→ Energy costs to keep the water temperature at 30°C have been reduced by 70%

Water
Installation of 53 kW mini hydro power plant
→ Electricity is used at the junior high school during daytime and for street lights at night.

Contact
Eco-Model City Promotion Office, Environment Maintenance Division, Yusuhara Town Office
Tel: 0889-65-1251 Fax: 0889-65-0221
1444-1, Yusuhara, Yusuhara-cho, Takaoka-gun, Kochi 785-0695

「環境未来都市」構想
"FutureCity" Initiative

Minamata City, Kumamoto
(Eco-Model City)

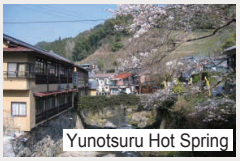
About Minamata City

- Population: 25,276 (as of the end of May, 2017)
- Area: 163.29 km^2

Attractions include the rias coastline of Yunoko Beach overlooking the Shiranui Sea, hot spring towns brimming with nostalgic history, and environmentally-themed facilities


Salad onions


Minamata Tea


Yunotsuru Hot Spring

Minamata Environmental Academia

The facility was established in April, 2016 as a central hub of higher education/research activities.

Philosophy of the Minamata Environmental Academia

<<Contribution to the local community>>
- To promote organic collaborations between industry, academia, government, and private residents, create and send new wisdom, and contribute to the revitalization of community (human development, community planning, job creation)

<<Contribution to the world>>
- To consolidate the knowledge, wisdom, and lessons of Minamata and present solutions for realization of sustainable society to the world

Efforts toward SDGs in Minamata City

Holding of symposium

- We hold lecture and panel discussion on sustainability assessment of Minamata presented by Professor Managi of Kyushu University using new economic index "Inclusive Wealth Index" which is alternative to GDP.

Implementation of SDGs field work

- Students from Minamata High School designated as one of Super Global High Schools by MEXT explain regional efforts to foreign students based on SDGs.

Field work at Minamata by students from Keio University and universities in ASEAN countries

Students from Minamata High School select sites for filed works

Terraced rice fields | Social welfare facilities | Simple water supply system, RBS human excreta treatment plant, household wastewater treatment tank

Holding of open lectures for citizens

- Lectures with the content such as health, environment and food education helpful to residents' life while checking each theme with items of SDGs are open to form sustainable community.

Establishment of sustainable community

Contact
Minamata Environmental Academina, Comprehensive Policy Department, Minamata City (Attn: Tanoue)
Tel: 0966-84-9711 Fax: 0966-84-9713 e-mail: academia@city.minamata.lg.jp

「環境未来都市」構想
"FutureCity" Initiative

Miyakojima City, Okinawa
(Eco-Model City)

About Miyakojima City

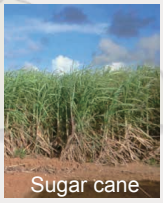
- Population: Approx. 55,000
- Area: 205 km²


City mascot: Miiya

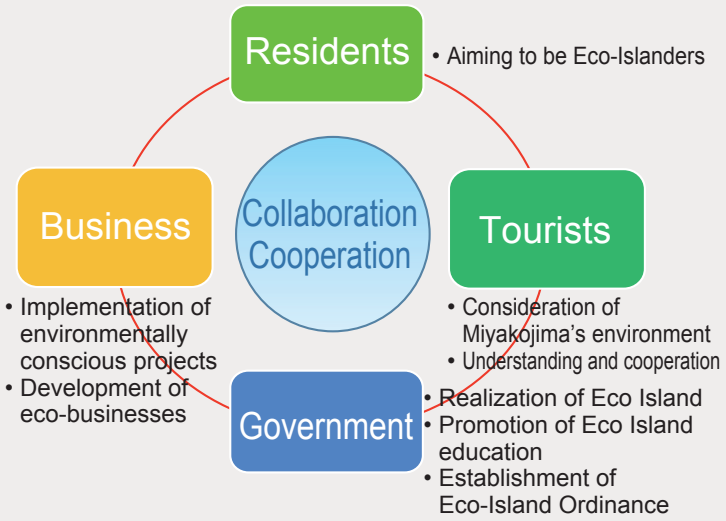
- Main industries: Agriculture and fisheries, tourism
- Main products: sugar cane, mangoes


Wind power (Karimata)


Mango

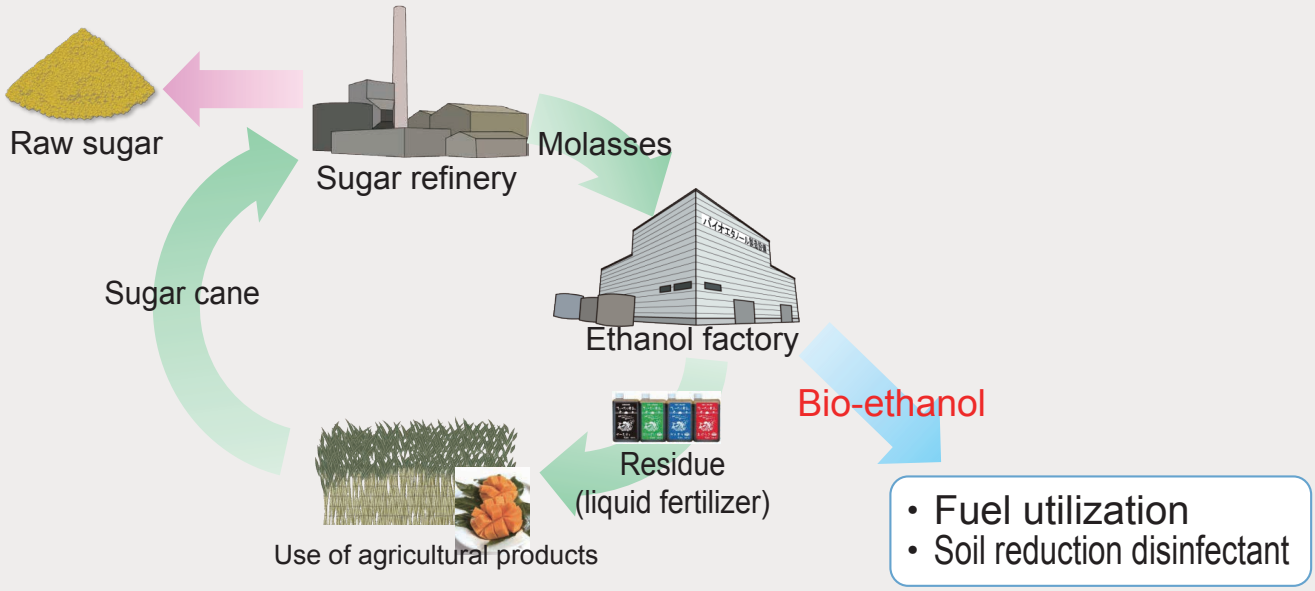

Sugar cane

Eco Island Promotion Ordinance



Miyakojima Bioethanol Project

Building a closed-loop society through the downcycling of sugar cane, Miyakojima's primary crop, such as using bioethanol made from the residue created in the process of sugar refining, and returning to the soil the liquid residue from the ethanol production process.



○Creation of closed-resources-loop, low-carbon society systems that use sugar cane.
○Revitalization of industry by adding value to sugar cane, the island's core industry.

Highly efficient production of bioethanol	Investigation of stability of bio-fuel distribution	Survey on Development of Applications for High Value-Added Bio-Ethanol
Strive to raise bioethanol production efficiency and reduce costs through further improvements to yeast.	Investigate the construction of stable distribution systems for the island' s bio-fuel and aim to expand the use of bio-fuel.	Deliberate on ways of using high value added ethanol other than for fuel, in an effort to make it more economical.

Contact Eco-Island Promotion Division, Planning and Policy Department, Miyakojima City (Attn: Suzaki)
Tel: 0980-73-0950 Fax: 0980-73-1081 e-mail: ts.ecotown@city.miyakojima.lg.jp

「環境未来都市」構想
"FutureCity" Initiative

Niigata City, Niigata
(Eco-Model City)

About Niigata City

- Population: Approx. 800,000
- Area: 726.45 km^2
- Land use: 48% farm land
- Food self-sufficiency rate: 63%

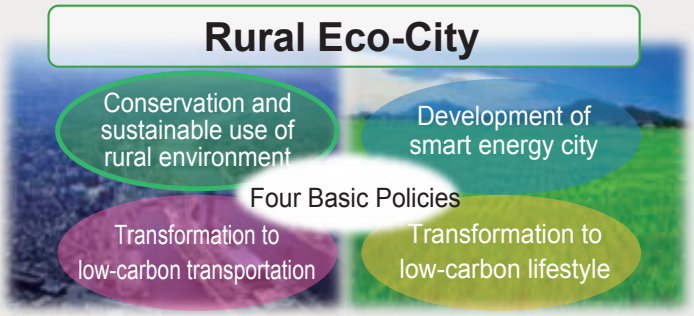
↑Kurosaki Chamame beans

Koshihikari rice, → grown in Niigata

↑Bandai Bridge and tulips

Niigata Eco-Model City Action Plan

Circulate abundant value between urban and rural areas, with the aim of creating a Rural Eco-City, a city that can achieve harmonious growth.



Promotion of "Exciting Education Farm from Niigata"

To foster affection and proud for the hometown as well as zeal for living by giving children and residents opportunities to experience agriculture. Also to further understand agriculture and food, and promote revitalization of agriculture at the same time.
"Agri Study Program" developed in cooperation between the Agriculture, Forestry and the Fisheries Department and the education board in accordance with the Courses of Study is currently underway at all schools in the city.

Situation to be realized

Support of agriculture

Farmers ← Children/residents

Farmers: Revitalization of agriculture

Children/residents: Human development through agriculture

Provision of learning through agriculture

Agri Park

- First public education farm in Japan
- With accommodations, able to have residential-type experience
- Support of sixth industry promotion
- Provision of experience programs using five senses

Place of activities

Ikutopia Shoku Hana

- Facility to convey attractiveness of food and flowers across Japan
- Provision of various experience programs

School education rice filed
School teaching material filed

Contact Environment Policy Division, Environment Department, Niigata City (Attn: Yoshida/Kobayashi)
Tel: 025-226-1363 Fax: 025-230-0467 e-mail: kansei@city.niigata.lg.jp

「環境未来都市」構想
"FutureCity" Initiative

Tsukuba City, Ibaraki
(Eco-Model City)

About Tsukuba City

- Population: Approx. 230,000
- Area: 283.722 km^2

Tsukuba Environmental Style: SMILe

A town of smiles created by our collective knowledge and technologies

Smart community
Mobile Traffic
Innovation & Technology
Learning & Education

つくば環境スタイル SMILe TSUKUBA

Smart Community –Utilization of environment data at SMAxECO City, Tsukuba Science City–

Energy data

Visualization at each house through HEMS

Data collection

Data server

Daiwa House Industry

Data provision

■SMAxECO City, Tsukuba Science City
(The area of independent houses for sale by Daiwa House Industry)
All houses have
- solar power generation system
- storage battery
- fuel cell (ENE FARM)
- HEMS

Tsukuba City

Research/Analysis

Feedback to the residents in the area

Collaborative research institution

Publication through conference presentation, etc.

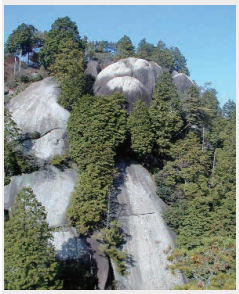
Contact Planning and Adjustment Group, Environment Division, Life Environment Department, Tsukuba City
Tel: 029-883-1111 Fax: 029-868-7591 e-mail: evm021@info.tsukuba.ibaraki.jp

「環境未来都市」構想
"FutureCity" Initiative

Mitake Town, Gifu
(Eco-Model City)

About Mitake Town

- Population: Approx. 18,500
- Area: 56.69 km^2 (60% forest)
- Attraction: A town rich in history and nature that flourished as a post town on the Nakasendo Trail


▲ Scenic beauty spot: Giant boulders of Oniiwa Park


▲ Bamboo lilies in bloom

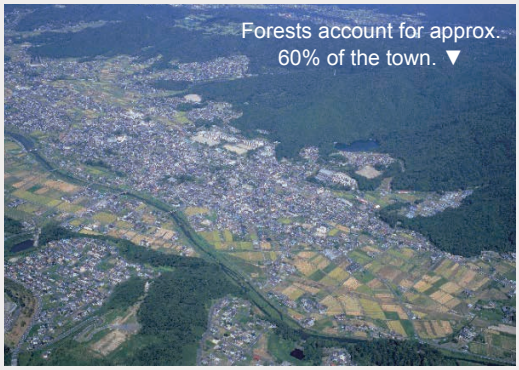

▲ Mitake Hanazushi, a new hometown cuisine

Idea of Eco-Model City to be achieved

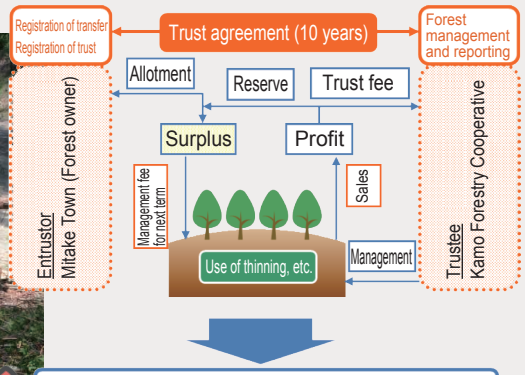
Image of achieved low-carbon community Mitake utilizing regional resources (based on the town action plan)

Aiming for low-carbon community planning

Various measures are underway to achieve the community's ideal Eco-Model City through cooperation with residents, businesses and the government.


Forests account for approx. 60% of the town. ▼


▼ Forest development by the entrusted operator is underway.



Managed forest is returned after the 10-year trust period.


▲ Proactive environmental education activities for children

▼ Promotion of growing green curtain


▲ Forests which has been neatly developed (thinning)

Community's symbol character, "Mimo-kun" ▲

Contact Eco-Model City Promotion Office, General Affairs Department, Mitake Town Office, Kani District, Gifu Prefecture (Attn: Hayakawa)
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「環境未来都市」構想
"FutureCity" Initiative

Amagasaki City, Hyogo
(Eco-Model City)

About Amagasaki City

- Population: 450,765
- Area: 50.72 km^2

A great strength of Amagasaki City is an integration of industrial and urban functions in the compact area. A variety of charms in the compact-sized city will entertain visitors.

Night view of the waterfront factory zone

Large companies and small and medium-sized enterprises with state of the-art technologies are located in the waterfront industrial area.

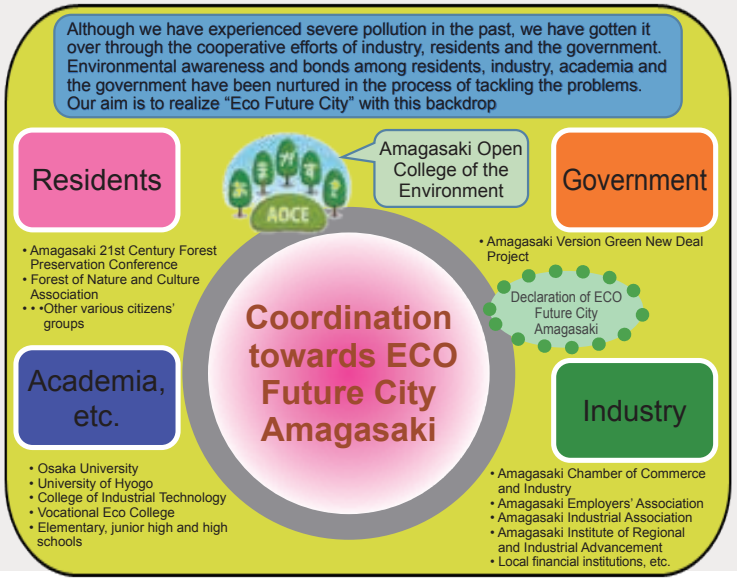
Cosmos Garden

Natural forests and rural landscape can be seen in the northern area of the city.

Shopping arcade near station

Bustling shopping arcades have been formed near railway stations.

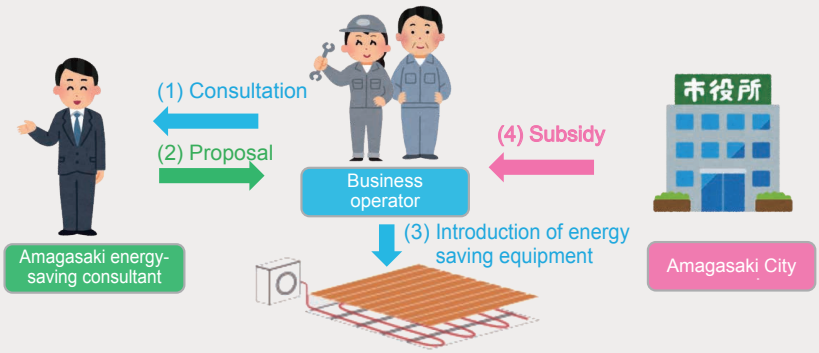
ECO Future City, Amagasaki



Amagasaki Version Green New Deal Project ~Pursuing Coexistence of Environment and Economy~

●Amagasaki City, as an industrial city, is aiming to become the "city facilitating coexistence of environment and industry, positive circulation of regional economy" where the industrial world meets high environmental demand of residents and business operators through supply of technology, products and service.

(1) Amagasaki City Project promoting Amagasaki energy-saving consultant's registration system and introduction of energy saving equipment

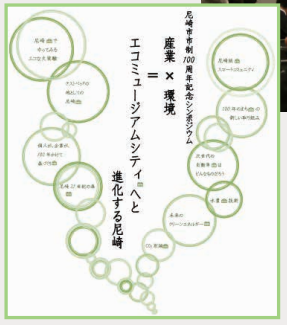


Amagasaki city has a unique energy-saving consultant registration project and an energy saving facilities introduction promotion project. The latter is that the city assist some expenses to small and medium-sized companies on introduction of energy-efficient equipment based on consultant's energy-saving proposals. Implementing both projects in harmony will be useful for CO_2 reduction in the city and realization of coexistence of environment and economy that the city pursues.

(2) "ECO Future City, Amagasaki" symposium

In November 2016, organizations declaring "ECO Future City, Amagasaki" held a symposium, called "Amagasaki evolving into industry x environment = eco museum city" to celebrate the 100th anniversary of Amagasaki City. Pursuing creation of smart and compact community, under the concept of "eco museum" positioning the whole Amagasaki as the base of experimental and practical eco-activities, 15 guests introduced advanced initiatives, etc. at the symposium.
The lively discussion on the two themes in the round-table style gave all participants an opportunity to find new possibilities of "Future ECO city, Amagasaki."

Theme 1: Front line of hydrogen energy!
Theme 2: Action plan supporting realization of "smart community"



Picture of symposium

Contact Environment Creation Division, Environment Department, Economy and Environment Bureau, Amagasaki City
Tel: 06-6489-6301 e-mail: ama-kankyo-sozo@city.amagasaki.hyogo.jp

「環境未来都市」構想
"FutureCity" Initiative

Kobe City, Hyogo
(Eco-Model City)

About Kobe

- Population: Approx. 1,533,501
- Area: 557.02 km^2
- Main industries: Manufacturing, service industry, fashion, etc.

Kobe's Environmental Master Plan

By promoting policies based on these four key principles, we hope to ensure Kobe will long continue to be a town blessed with greenery and sunshine.

Four Key Principles

1. A society with low carbon dioxide emissions
2. A society that uses resources effectively and minimizes waste
3. A society with a richly diverse ecosystem
4. A society in which people are safe and comfortable and which offers peace of mind

Promotion of KOBE, a City Contributing to Environment

We are promoting achievement of "life and society with less carbon dioxide emission" with the main three pillars.

Promotion of energy saving

Promotion of KOBE COOL CHOICE

Implementation of events, etc. to raise awareness of residents/business operators

Community rental bicycle service (Kobelin)

LED illumination

Widespread use of renewable energy

Utilization of woody biomass

Utilization of logged timbers, etc. by forest development as regional energy

Kobe biogas

Effective use of digestive gas generated in the course of sewage treatment for power generation, etc.

Demonstration experiments for bio-coke utilization

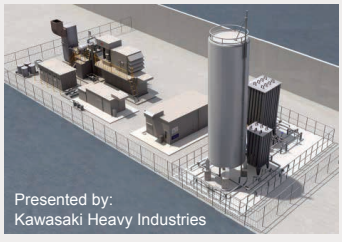
Aiming for fuel production from food waste, etc. and cyclic use in the community

Promotion of innovative technology development

Construction of a Hydrogen Supply Chain

Hydrogen supply system producing liquefied hydrogen overseas, transporting it by ship, unloading and supplying it in Japan

Development of hydrogen-powered system



System for supplying public facilities with electricity and heat by establishing electric power plants using hydrogen and natural gas as fuel

* Verification project selected for subsidy by NEDO (New Energy and Industrial Technology Development Organization) is underway through the cooperation with local companies, etc.

Contact Environmentally Friendly City Division, Environmental Policy Department, Kobe City Government (Attn: Suzuki/Tashiro)
Tel: 078-322-5283 Fax: 078-322-0328 e-mail: kankyokoken@office.city.kobe.lg.jp

「環境未来都市」構想
"FutureCity" Initiative

Nishiawakura Village, Okayama
(Eco-Model City)

About Nishiawakura Village

- Population: 1,478
- Area: 57.93 km^2
- Land use: 95% forest, 5% agricultural/residential land and other
- Major industries: Forestry, tourism

Winter

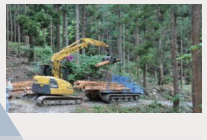
Summer

100-Year Forest

100-Year Forest Project (Overview)

Contracting Entity
Forest Owners
(Village Residents)

100-Year Forest Creation Project



Consignment contract for long-term operations and management

Sub-contracts forest management

Returns the forest in properly managed state

Contracted entity and sub-contracting entity
Nishiawakura Village

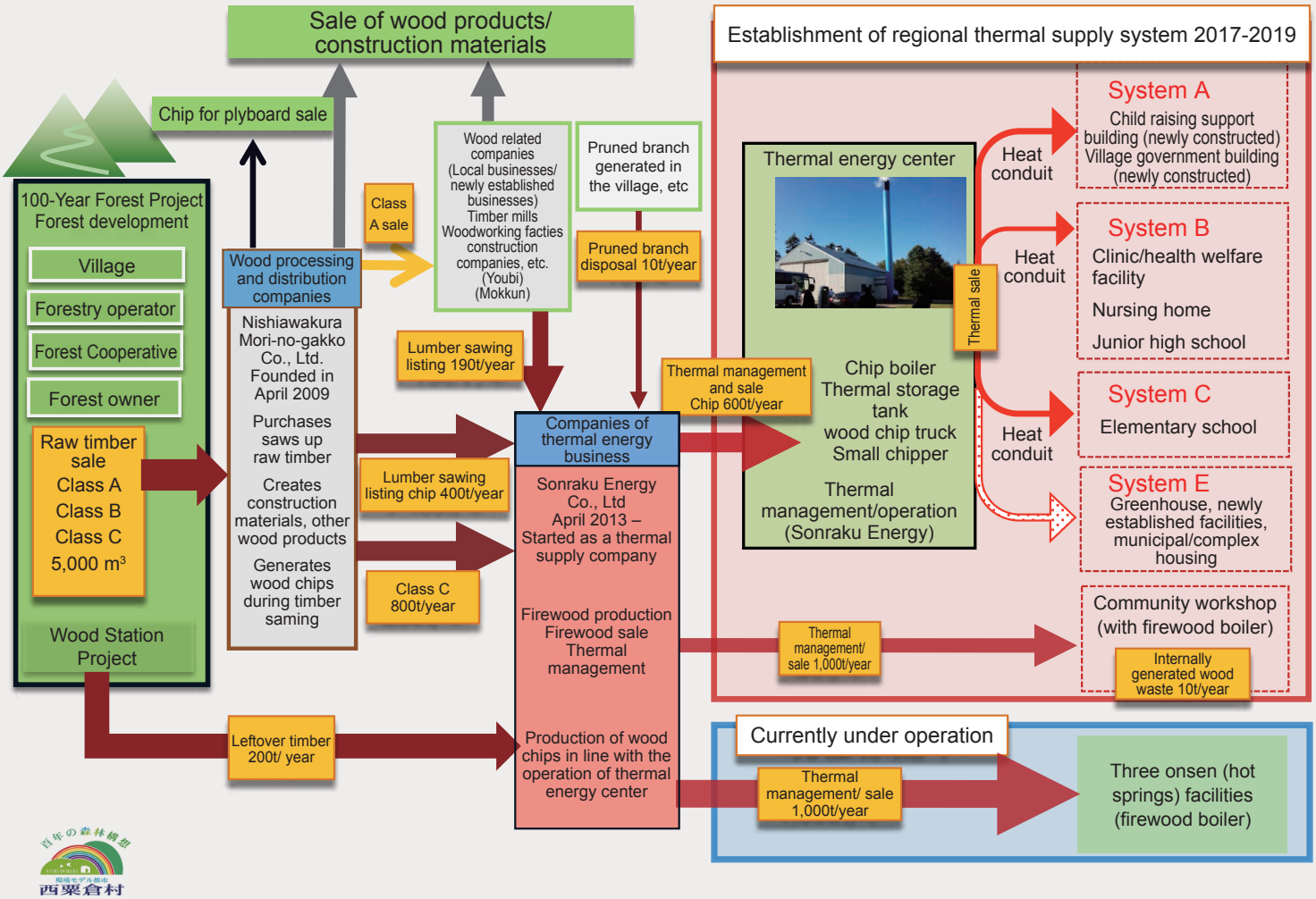
Contracts forest maintenance

Contracted entity
Mimasaka Tobi Forestry Cooperative

Timber users and downcycling business
Local startup businesses, such as Mori-no-gakko
Timber A/B → Processed and sold as wood products
Timber C → Used as energy

Forest School Project

Cascade Use of Forest Resources (Woody Biomass Thermal Use)



Contact Eco-Model City Promotions, Industry and Tourism Division, Nishiawakura Village Office (Attn: Keizo Shirahata)
Tel: 0868-79-2111 Fax: 0868-79-2125 e-mail: k-shirahata@vill.nishiawakura.lg.jp

「環境未来都市」構想
"FutureCity" Initiative

Matsuyama City, Ehime
(Eco-Model City)

About Matsuyama City

- Population: Approx. 512,373
- Area: 429.40 km^2
- Main tourist destinations: Dogo Onsen, Matsuyama Castle
- Local specialties: Beni Madonna oranges, Setoka mandarins

Dōgo Onsen

Matsuyama Castle

Beni Madonna

Matsuyama, a Proud Eco-Model City

Promotion of Matsuyama Sunshine Project

Promotion of Smart Community

Promotion of Healthy City Where People Enjoy Walking

Promotion of Local Recycling System

→ Build a sustainable, low-carbon community

Matsuyama Smart City Promotion Project

○For the field of the islands area (Nakajima District) of the city, we are conducting feasibility surveys and verification projects in a step-by-step manner.

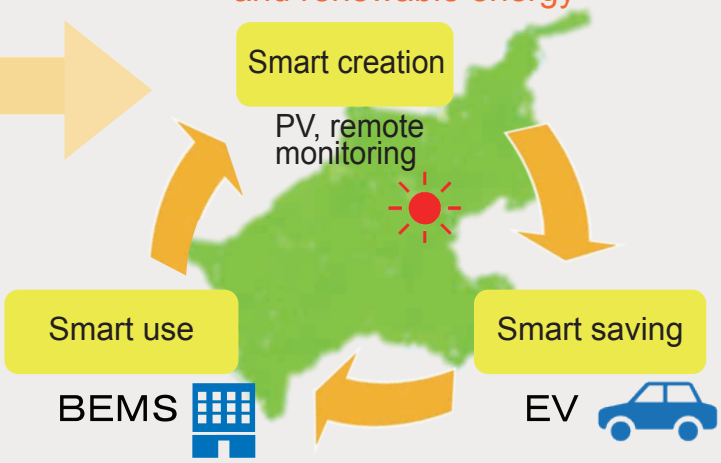
○The aim is that the whole city changes into energy effective smart city by introducing BEMS, remote monitoring of solar power generation and utilizing obtained data and know-how.

2014 Feasibility survey for introduction of renewable energy

2015 Deliberation by council comprising industry, academia, citizens and government

2016 Introduction of BEMS in Nakajima Branch Office

Future image of E-Island (good island), "Nakajima" with the harmony of gift from the sun and renewable energy



Contact Eco-Model City Team, Eco-Model City Promotion Division, Environment Department, Matsuyama City Hall (Attn: Sako/Onishi)
Tel: 089-948-6960 Fax: 089-934-1861 e-mail: kankyou-m@city.matsuyama.ehime.jp

「環境未来都市」構想
"FutureCity" Initiative

Niseko Town, Hokkaido
(Eco-Model City)

About Niseko Town

- Population: Approx. 4,900
- Area: 197.13 km^2
- Main industries: Tourism, agriculture
- Tourist numbers: Approx. 1.7 million

NISEKO
HOKKAIDO JAPAN


Organic wine


Halloween pumpkins and Niseko Station


Powder snow

Niseko Smart Challenge 86

Energy conversion


Commission for establishment of new regional electric power company

Energy saving/use of renewal energy in the tourism sector


Initiatives by tourism business operators and tourists in an integrated manner

Grass-roots effort


Initiatives led by residents

FY2050 → 86% CO_2 reduction goal
* From the FY 1990 level

Toward the realization of an international environmental resort city

Cross-sectional Initiatives for Tourism and Environment

In order to reduce CO_2 emissions from the tourism sector which account for approx. 40% of the total CO_2 emissions in Niseko City, we are promoting initiatives by tourism business operators and tourists in an integrated manner.

■ Introduction of energy saving equipment by tourism business operators

Shift to LED for illumination of hotels in the town, introduction of heat exchanger equipment for discharge of hot spring water, consideration of geothermal power generation

■ Environment/energy saving workshops, energy saving assessment for tourism business operators

Obtained cost reductions by energy saving are used to provide new services and investment in equipment for further promotion of tourism.

■ Eco night cafe


2nd night –Wine and music night–


1st night –Eco Sandan by Katsura Sandan–

In order to provide opportunities for residents to consider CO_2 reduction as their own issue, we are holding cafe-style environmental classes with the theme on familiar topics for easy participation by anyone.

■ Edu-Vacation = education + vacation

Students from the Niseko High School become eco-ambassadors and implement eco-tours.

Contact Eco-Model City Promotion Office, Planning and Environment Department, Niseko Town Office (Attn: Ohno/Sakai)
Tel: 0136-44-2121 Fax: 0136-44-3500 e-mail: kankyo-e@town.niseko.lg.jp

「環境未来都市」構想
"FutureCity" Initiative

Ikoma City, Nara
(Eco-Model City)

About Ikoma City

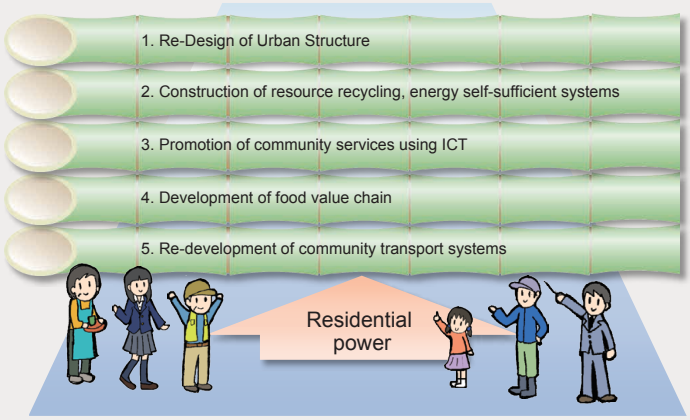
- Population: Approx. 120,742 (as of April 1, 2017)
- Area: Approx. 53km^2
- Ikoma is a residential city, whose charm lies in its rich natural surroundings, as typified by the Mt. Ikoma Range


Traditional handcraft, Takayama Chasen bamboo tea whisk


Mt. Ikoma

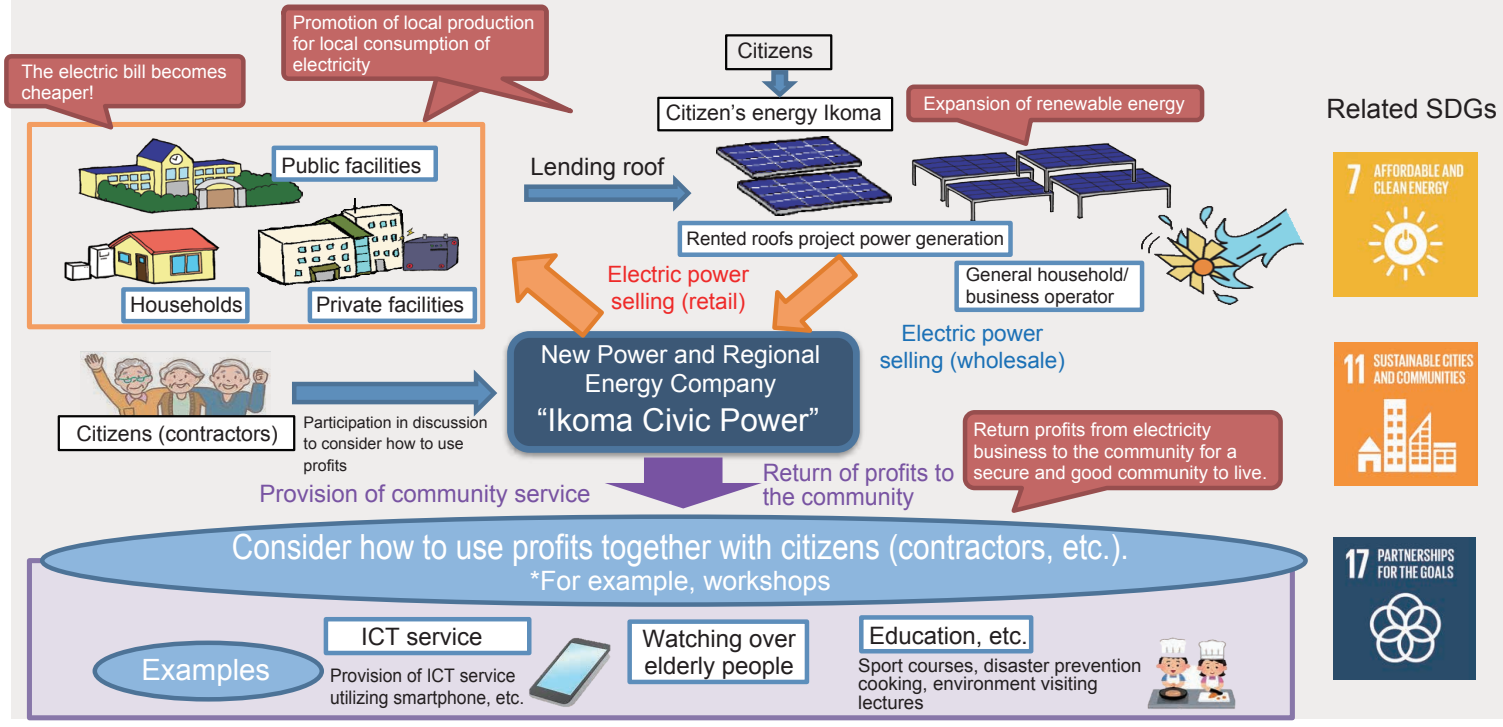
Five pillars of initiatives

Future Vision for Ikoma
Low-carbon, recycling residential city, built through collaboration between residents, business, and government



Establishment of the New Power and Regional Energy Company

The regional corporation founded by Ikoma city, citizen group and regional companies buys electric power from Ikoma and surrounding areas and sells to citizens and regional companies to promote local power consumption.
In addition, we are planning to consider how to use profits from the electricity business at workshops, etc. participated by citizens and provide community service such as monitoring/shopping support for elderly people, child-raising/education support for young people, information provision using ICT.



Related SDGs

Contact Eco-Model City Promotion Division, Regional Vitality Creation Department, Ikoma City Office (Attn: Amano/Utoo/Sakurai)
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「環境未来都市」構想
"FutureCity" Initiative

Oguni Town, Kumamoto
(Eco-Model City)

About Oguni Town

- Population: Approx. 7,300
- Area: 136.72 km² (80% forest)
- Main industries: Agriculture, Forestry, Tourism

Aso Oguni Jersey cows' milk

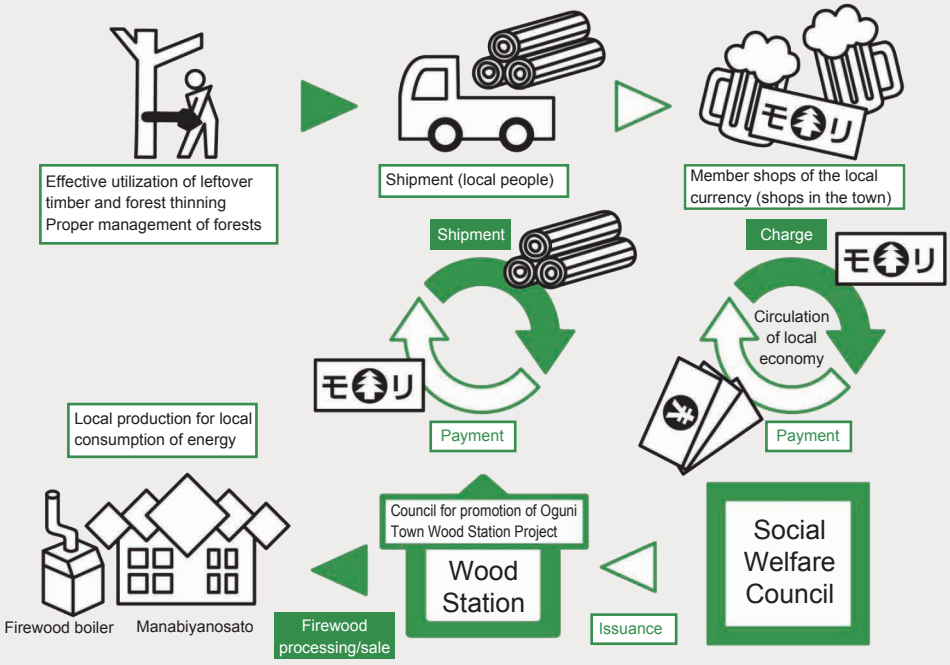
Nabegataki Falls, a "power spot" of the area

Business card with SDGs logo

All staff members of Oguni Town Office select a logo of SDGs 17 goals that represents their job and prepare and use business cards including that logo.

"Wood Station Project" with "Leftover Timber" and "Local Currency"

Structure to **vitalize forests** and **people**



The advantage of Mori Vouchers is the number of shops that accept the vouchers.

College students experience lumber shipping as a part of training education. (Of course, they can obtain the local currency for their shipment.)

"Leftover timber" and "local currency" circulate within the community.

Leftover timber brought by forest owners and forest volunteers is purchased with the local currency "Mori Vouchers" equivalent to 6,000 yen a ton. Mori Vouchers can be used at 80 shops including restaurants and supermarkets in the town.

Contact Eco-Model City Promotion Team, Policy Division, Oguni Town Office (Attn: Hasebe/Utsunomiya)
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