



- Next-gen transport
- Energy, environment & energy conservation
- Health & mobility
- Safety & security
- Disaster prevention & reduction
- Infrastructure
- Medicine & welfare
- Compact city planning
- Reuse & renovation
- Branding

Japan Innovative Cities Award



LEADING URBAN PLANNING INITIATIVES IN JAPAN

The Ministry of Land, Infrastructure, Transport and Tourism shares information domestically and abroad about leading urban planning initiatives in order to encourage the adoption of innovative practices, as well as promote exports of cutting-edge urban technologies and stimulate inbound investment and interest. Since 2016, the Ministry has held a competition to recognize advanced urban development projects aimed at solving urban challenges and creating next-generation urban spaces. Here we will introduce thirteen projects that were recognized in 2016, 2017 and 2018.

PREVIOUS AWARD WINNERS

3rd competition, 2018

Recovery Plan of Tsuchiyu Onsen as Home of Health, Hot Springs & Kokeshi Dolls

Fukushima, Fukushima

New Model of Suburban Town Development Through Public-private-academic Collaboration

Saitama, Saitama

Compact City Planning to Achieve a Smart Wellness City

Urban and rural sustainability for a depopulating society

Mitsuke, Niigata

Combined Use Project of Reclaimed Wastewater in Sakai

Sakai, Osaka

First Public-private Monitoring Service in Japan

Kakogawa, Hyogo

2nd competition, 2017

Town Development of Futako Tamagawa Rise

Setagaya, Tokyo (east of Futako Tamagawa Station)

Namiki Alleyway Ikoiko Vacant Store Regeneration Project

Iida, Nagano

Public-private Town Planning by the Local Community and Citizens

Urban development project making use of local resources around Hyugashi Station

Hyuga, Miyazaki

1st competition, 2016

Muroran Green Energy Town Concept

Muroran, Hokkaido

Kashiwa-no-ha Smart City

Kashiwa, Chiba

Otemachi, Marunouchi, and Yurakucho Area Management

Sustainable development project in the Tokyo Station area

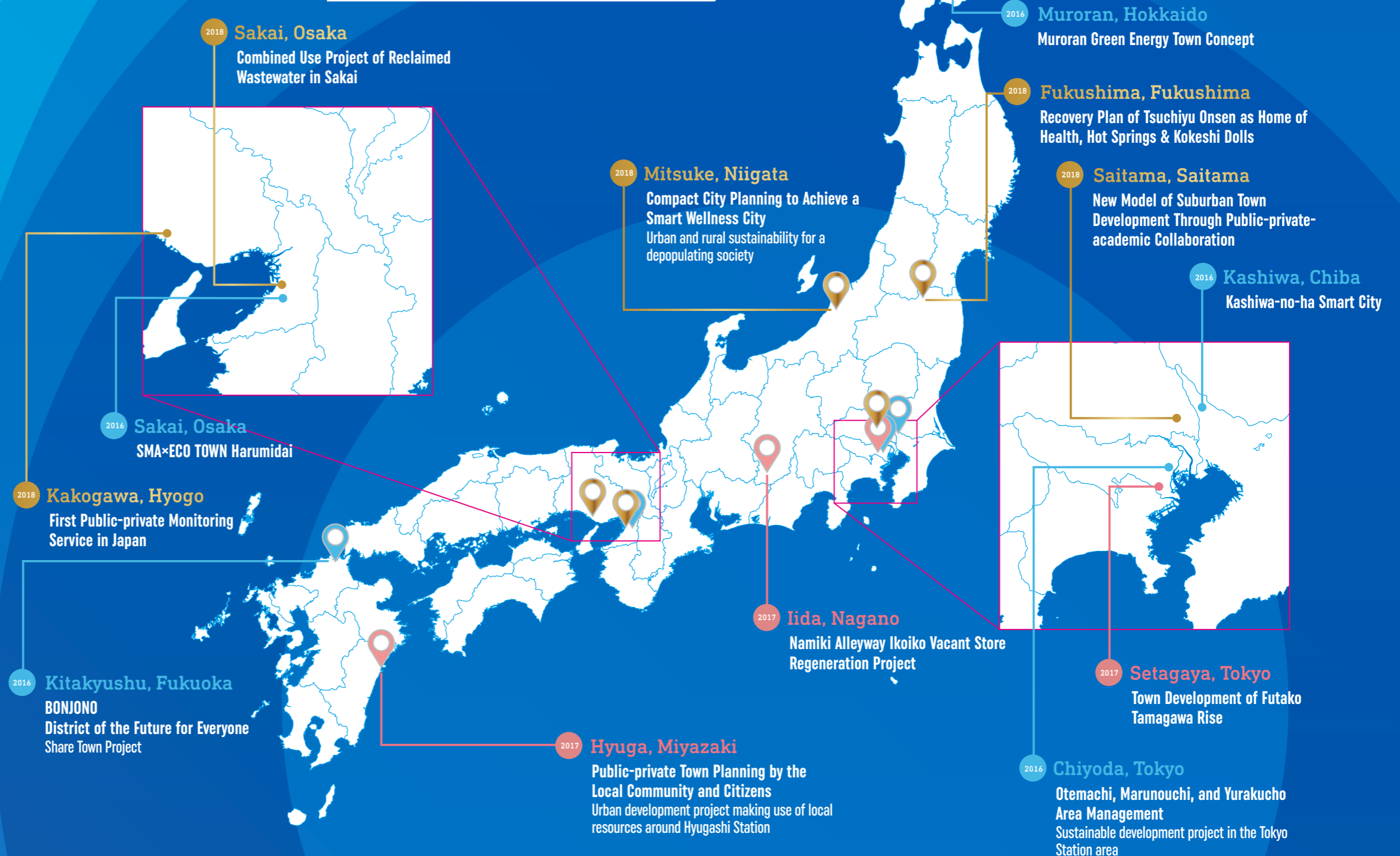
Chiyoda, Tokyo

SMA×ECO TOWN Harumidai

Sakai, Osaka

BONJONO District of the Future for Everyone Share Town Project

Kitakyushu, Fukuoka





Recovery Plan of Tsuchiyu Onsen as "Home of Health, Hot Springs & Kokeshi Dolls"

PROJECT ENTITY: Tsuchiyu Onsen Town Planning Council
LOCATION: Fukushima, Fukushima

Background and progress

Tsuchiyu Onsen is a hot spring tourist destination located approximately 16 km southwest of Fukushima City, the prefectural capital, at 450 meters elevation inside the Bandai-Asahi National Park, and is known for making traditional carved *kokeshi* dolls. In March 2011, the Great East Japan Earthquake and the subsequent accident at the Fukushima Daiichi Nuclear Power Plant damaged the prefecture's image and caused a dramatic drop in tourists, forcing five of 16 accommodations in the town to go out of business. In addition, demographic aging and population decline accelerated and pushed the ratio of residents over 65 to a high level of 52%.

Facing this depressed condition, locals resolved to start the Tsuchiyu Onsen Recovery and Regeneration Council (later the Tsuchiyu Onsen Town Planning Council) not simply in order to return things to how they were before the disaster, but to turn the town into a model for hot spring resorts nationwide. The plan is being implemented after discussion of topics including creating a model region to show the future of hot springs, adapting to demographic aging and population decline, developing an ecotown using renewable energy, public-private-academic collaboration, and establishing an organization to support planning.

About the project

The Tsuchiyu Onsen Town Planning Council is composed of 17 organizations including the local hot spring association, tourism association, and local neighborhood councils, and is spearheaded by Fukushima City and Genki Up Tsuchiyu Co.,Ltd., which was established with capital from two of the council members.

At the request of the local community, Fukushima City established a public bath, community, and tourist center in a former hotel, and has also invested in infrastructure including roads and a park, which are planned to be completed in March 2019.

Genki Up Tsuchiyu Co.,Ltd. is experimenting with a multi-pronged business model to regenerate the hot spring town by returning proceeds to the local

area from new ventures including geothermal power generation, shrimp cultivation, and hydropower generation at an earthen dam.

These projects have generated new industry and employment in the local area, and led to an increase in visitors by creating opportunities for tourism and educational experiences. Additionally, once its contract to sell electricity exclusively to Tohoku Electric Power Co.,Inc. expires, Genki Up Tsuchiyu Co.,Ltd. is considering providing inexpensive electrical power to the local area. It also aims to introduce megasolar and biomass electricity generation, creating a sustainable ecotown that utilizes all of the area's renewable energy.



A planning project improved the scenic appearance of the hot spring town



A binary cycle geothermal power plant is a focus of the town plan



Public bath opened in a renovated hotel



Event to catch shrimp cultivated using heat from the hot spring



A tour of renewable energy facilities



New Model of Suburban Town Development Through Public-private-academic Collaboration

PROJECT ENTITY: Misono Town Management Association, Inc.
LOCATION: Saitama, Saitama

“ Background and progress

The Misono district, located in southeast Saitama City within 25 kilometers of central Tokyo, is the site of large-scale greenfield development intended to create an urban subcenter around the Urawa-Misono Station on the Saitama Railway Line, which opened in March 2001. Beginning in FY2000, a land readjustment project known as “Misono Wing City,” with a planned population of 32,000, commenced on a site of 320 hectares stretching across Saitama City’s Midori and Iwatsuki Wards and encompassing Saitama Stadium 2002 Park, which opened in October 2001. Construction of buildings including homes

and shops and public facilities such as schools and parks has progressed gradually since the first area opened in 2006, and the district has seen a rapid increase in population, particularly of families with children. The new town development initiative aims to create a low-carbon, sustainable local district that offers fulfilling lifestyles and community by utilizing local resources including the Ayase River, Minuma Tambo, and Saitama Stadium, while proactively integrating cutting-edge technologies such as IoT and AI.

About the project

Based at the Urban Design Center of Misono (UDCMi), an information and activity hub established in October 2015, the Misono Town Management Association is a voluntary organization that has brought together private companies, universities, local community organizations, land readjustment project stakeholders and government entities in public-private-academic partnership to improve the local area’s social and physical infrastructure.

Numerous initiatives, including urban design guidelines and the creation of high-quality waterfront spaces, are being pursued in order to build a comfortable urban environment focused on walkability, with a short-term goal of creating a world-class “stadium town” around Saitama Stadium. At the same time, the latest technologies are being used to reduce environmental impact, such as the implementation of a digital grid to encourage local

production and consumption of renewable energy, and development and testing of a rapid-charging system for electric buses using electricity generated from railroad braking.

Moreover, the area’s quality of life is being improved through local community services using ICT for childcare support, shared mobility, and health and wellness promotion. In order to effectively utilize local data accumulated through these projects, development and testing of a data platform system is also underway. Furthermore, local events and social workshops are held in order to encourage community interaction and civic pride in the newly developed area.

The Misono Town Management Association aims to establish a cycle of reinvesting project revenue into local development as various projects mature and become interconnected.



Misono Wing City around Urawa-Misono Station (May 2018)



Low-carbon residential district designed to improve resilience and encourage community



Misono-Ichi market held in the public space near the station



Misono Mileage Programs for Wellness Activities & Misono Touch-Walking Challenge



Compact City Planning to Achieve a Smart Wellness City

Urban and rural sustainability for a depopulating society

PROJECT ENTITY: Mitsuke City
LOCATION: Mitsuke, Niigata

“ Background and progress

Mitsuke began collaborating with Tsukuba University in 2002 on local programs including health and exercise classes in order to control the increasing expense of social welfare due to rapid aging and population decline. It was among the first cities nationwide to start working towards a sustainable city with policies focused on health, but the limited number of residents who were interested in maintaining regular exercise habits resulted in only a modest reduction of social welfare expenditures.

About the project

Mitsuke has implemented a town plan focused on walkability with the goal of promoting health. Specifically, the city constructed various civic facilities (Community center, Public bath, City art gallery, etc.) in a compact area of the central city, and implemented a public transport network enabling travel from all areas of the city to the center without a car. This created more natural opportunities for walking and interaction among residents. Moreover, the city administration works to gain the support of residents by clearly explaining the positive effects of walking for personal health and reducing social welfare costs.

These policies have led to many residents actively moving around the city of roughly 40,000 people, where public transport use increased

Based on Mitsuke's research showing that around 70% of residents without exercise habits had no intention to start, and a correlation between reliance on automobiles and diabetes, the city administration embarked on an effort to restructure the community into a walkable compact city (smart wellness city) where residents do not rely excessively on private automobiles, and maintain their healthy lifestyles thanks to public transport, bicycling, and walking.

approximately threefold to 161,000 trips per year, while the city's civic facilities have become lively venues with 1.95 million annual visits. This success further spurred the opening of ten new shops in the vicinity of the new facilities in the first three years.

The city's ratio of residents eligible for nursing care is lower than the national and prefectural average, and has been among the three lowest in the prefecture since 2008. Monthly per-capita nursing care expenses have been restrained and show a widening gap with the prefectural average since 2010. Annual per-capita medical expenses for residents over the age of 75 declined between 2011 and 2014, and have stayed around 200,000 yen below the nationwide average.



Health & exercise class at the Community center



Public bath



City art gallery



Community buses circulate around the city



Painting class at the City art gallery



Combined Use Project of Reclaimed Wastewater in Sakai

PROJECT ENTITY: Sakai City Waterworks and Sewerage Bureau
LOCATION: Sakai, Osaka

Background and progress

Sakai has pursued policies to preserve its historic heritage and contribute to the development of a low-carbon, environmentally-friendly city. As part of these initiatives, in 2009 the Sakai City Waterworks and Sewerage Bureau began a program to use reclaimed wastewater to supply toilets, irrigation systems, and industrial users.

The AEON MALL Co., Ltd. (below, AEON) expressed interest in using untapped sources of local energy at a new location on a former fac-

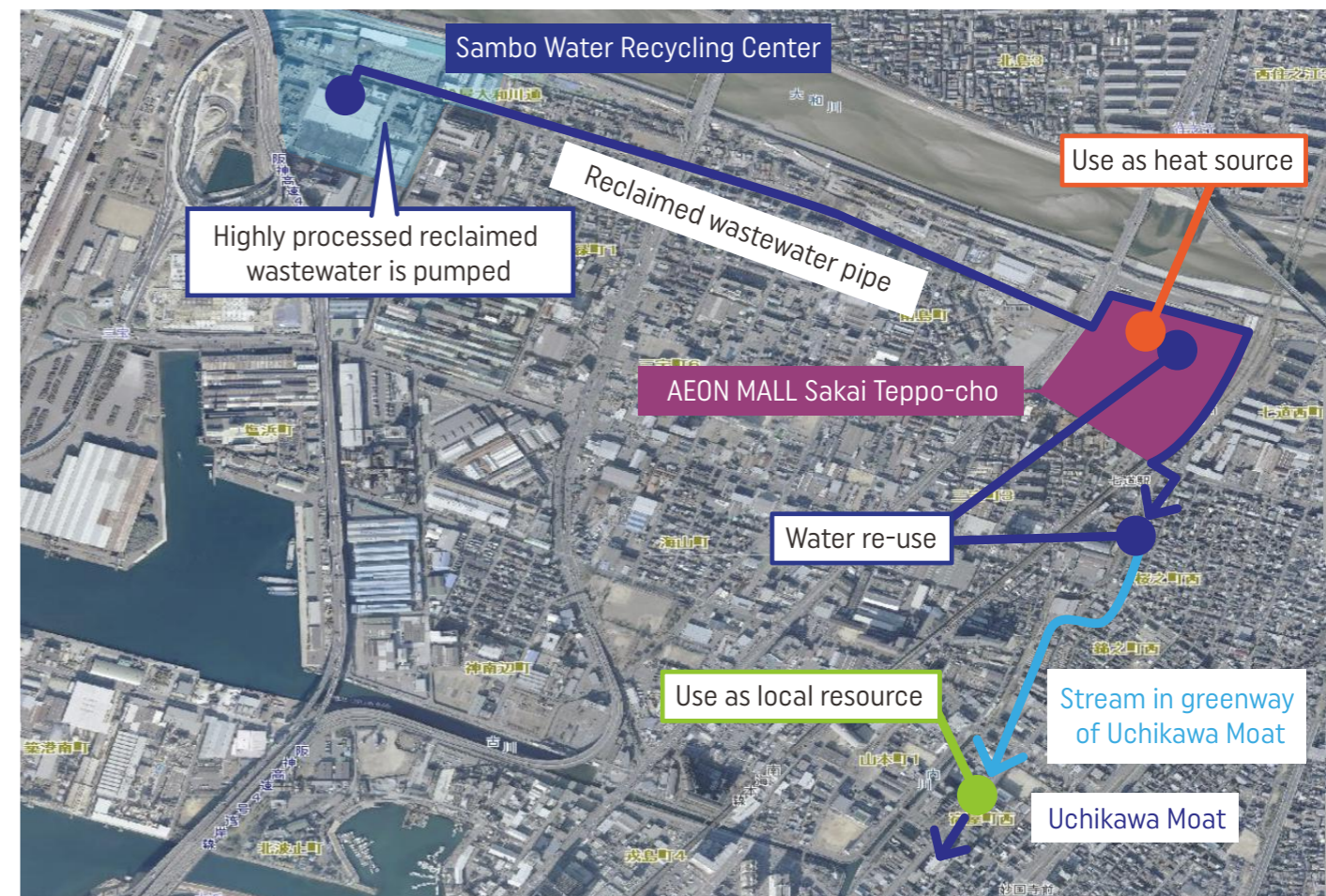
tory site west of Shichido Station on the Nankai Main Line, spurring exploration of new ways to make use of reclaimed wastewater. These studies showed that reclaimed wastewater could be supplied to AEON as a cost-effective source of heat and water, and also released into the historic Uchikawa Moat nearby, leading stakeholders to work together in a public-private partnership.

About the project

AEON uses reclaimed wastewater from the Sambo Water Recycling Center as a heat source for its heating, air-conditioning and hot water systems, as well as a water source for cleaning toilets. Additionally, after use as a heat source, the reclaimed wastewater is discharged into the nearby Uchikawa Moat, ensuring the stable flow and quality of the water and preserving the city's historic heritage. AEON and the Sakai City Construction Bureau, which manages the Uchikawa Moat, pay fees for the use of the reclaimed wastewater.

AEON achieved a 4.3% reduction in energy usage and an 8-tonne reduction of CO2 emissions compared to standard equipment (FY2017 data). In addition, AEON highlights its environmentally-conscious use of reclaimed wastewater on stickers and information boards around its facility, contributing to its corporate social responsibility and branding.

A sustainable solution to local preservation was achieved along with a significant CO2 reduction by tapping an unused local energy source and creating a win-win public-private structure.



Reclaimed wastewater is reused as a source of heat, water, and local resource



A public-private project coinciding with the opening of a commercial facility



System harvests heat from reclaimed wastewater



The small stream that flows into Sakai's historic Uchikawa Moat



Water supply system at Sambo Water Recycling Center



First Public-private Monitoring Service in Japan

PROJECT ENTITY: Kakogawa City
LOCATION: Kakogawa, Hyogo

Background and progress

Kakogawa faced challenges including the highest number of criminal cases in Hyogo Prefecture and an increasing number of elderly with dementia going missing. Solutions to these problems required policies to strengthen the community and improve safety and security by preventing crime. Under the banner of “a city chosen by young families,” Kakogawa began public-private collaboration to introduce ICT systems with the aim of creating a safe and secure city. In order to increase satisfaction among residents and improve quality of life, it

devoted special attention to creating an environment where families with young children can live safely, and strengthening the local community to look after children and the elderly.

Moreover, consultations with private companies to bring unique solutions to the project led to the adoption not only of security cameras, but also monitoring systems using BLE (Bluetooth Low Energy) tags, and application of vehicle-mounted cameras used in trials of self-driving cars.

About the project

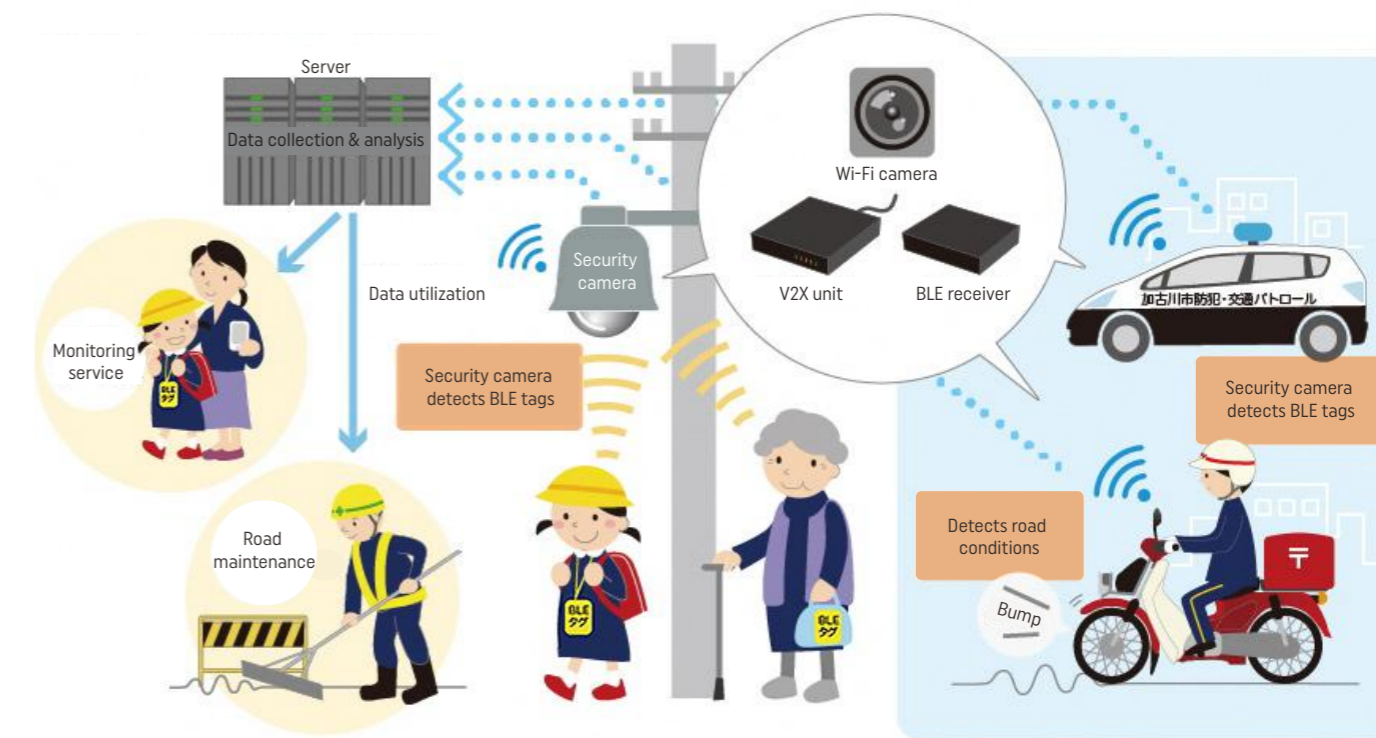
Around 1,500 security cameras have been installed along streets, mainly around schools. The security cameras discourage crime, and are all connected to a communication network that enables rapid response when crimes occur (image data is strictly managed based on an ordinance regarding the installation and management of security cameras).

Moreover, detectors that receive signals from BLE tags are installed in the security cameras, and cameras and detectors are also mounted on the local delivery vehicles of cooperating private companies such as JAPAN POST Co., Ltd. Additionally, cooperation of local residents through a “Monitoring Volunteer App” for smartphones constructs an even more comprehensive monitoring network. The public-private monitoring system has earned a positive response from

residents.

Furthermore, a system was developed to collect a wide variety of data (disaster prevention, transportation, infrastructure, etc.) from scattered local sources and share it in the cloud to help address local problems and create new administrative services. A smartphone application was also developed to access the system.

The project has coincided with a decline of more than 24% in the number of criminal cases in the city and has positively contributed to the development of a safe and secure community. Going forward, Kakogawa plans to create additional value through public-private-academic collaboration to analyze and process the data collected from the IoT devices throughout the city.



Various IoT devices gather data



Image of monitoring service



Security camera on a street near a school



Postal delivery motorbikes are outfitted with monitoring tags and cameras

K A K O G A W A H Y O G O



Town Development of Futako Tamagawa Rise

PROJECT ENTITY: Futako Tamagawa Rise Council
LOCATION: Setagaya, Tokyo (east of Futako Tamagawa Station)

“ Background and progress

This district is located on the east side of Futako Tamagawa Station along a private railway line in the Tokyo suburbs, sandwiched between the Kokubunji Cliff Line and the Tama River. The area had lost its vitality after the commercial avenue began to decline in the 1980s and the Futako-tamagawaen Amusement Park closed in 1985. In response, local leaders came together to implement an urban redevelopment

project making use of the former amusement park site (phase one began in 2007, phase two in 2012). Furthermore, after the end of construction on the first phase in 2011, the Futako Tamagawa Rise Council was established by the rail company and various local management associations to sponsor events and engage in town management activities, with the goal of enhancing the area's vitality and local brand.

About the project

This urban redevelopment project has resulted in an always-bustling area of diverse uses, including approx. 70,000 sq. meters of commercial facilities, approx. 80,000 sq. meters of office space, housing for 1,000 families, a bus terminal, and a hotel. The site also contains approx. 6,000 sq. meters of green roof space, part of 10,000 sq. meters of total green space, and has earned a LEED Neighborhood Development Gold Rank Certification recognizing the redevelopment's commitment to nature and eco-friendliness. The project aims to engender new demand in the inner

suburbs and reduce over-crowdedness on commuter trains by offering a working environment unlike those from that available in the urban core.

In addition, the Futako Tamagawa Rise Council is engaged in town management activities, including hosting participatory events for neighborhood children that make use of the site's natural environment. The successful creation of a lively area and local brand has also led to more events hosted in conjunction with outside companies.



The entire district



Commercial facilities in front of the station and office towers



Green Roof is a part of focus on nature



Public spaces host diverse events



Ribbon Street walking path

S E T A G A Y A T O K Y O



Namiki Alleyway Ikoiko Vacant Store Regeneration Project

PROJECT ENTITY: Iida Machizukuri Company
LOCATION: Iida, Nagano

Background and progress

Located in the center of Iida, Nagano, the Ikoiko project targets an area dealing with the spread of vacant stores and hollowing-out due to suburbanization. Previously, public-private projects had been pursued in attempts to redevelop the central areas of the city, but landowners around the Namiki Alleyway declined to participate in redevelopment out of a desire to remain in their homes. The area remained under-developed and an obstacle to the city's revitalization.

As the landowners grew older, they became less inclined to proactively make use of their real estate and negotiate with potential tenants. In order to resolve the vacant store problem and help reduce the burden of landowners, Iida Machizukuri Company, a trusted local company that had previously been involved in city redevelopment projects, led the area in preparing for new businesses.

About the project

In an area with many vacant buildings and stores, the Iida Machizukuri Company rented land and buildings from landowners, undertook renovation, and sublet the spaces to tenants.

During the process of finding tenants, six related community organizations hosted a nine-month startup camp to support people wishing to start a business. This course taught participants

how to plan, run, and finance their business.

Of numerous applicants, seven tenants were selected based on their potential to both fit into the area and achieve a stable business.

This project aims to create a comfortable environment in which people can wander freely between the newly developed establishments, all of which serve food or drinks.



Café located in an old wooden building



The entire alleyway



Open terrace at the center of the alleyway



Startup camp to train business owners



Renovated warehouse is used as management company office



Public-private Town Planning by the Local Community and Citizens

Urban development project making use of local resources around Hyugashi Station

PROJECT ENTITY: City of Hyuga, Miyazaki Prefecture, JR KYUSHU RAILWAY COMPANY, Hyuga Urban Core Revitalization Council, Hyuga Urban Core Event Coordination Council
LOCATION: Hyuga, Miyazaki

“ Background and progress

This 50.6-hectare project area surrounds Hyugashi Station on the JR Nippo Main Line in the center of Hyuga, Miyazaki. Population in the city's central areas had fallen significantly and shops were closing due to suburbanization, leading to the general decline of the urban core. In this context, Miyazaki Prefecture, Hyuga City, JR Kyushu Railway Company, and local residents

have collaborated to revitalize the central area and create a sustainable compact city. They pursued land re-adjustment, grade separation of the rail line, construction of community center facilities, and new infrastructure for commercial activity. In addition to these four projects, various citizen-driven activities are pursued under the banner of “the city as a stage for residents.”

About the project

Locally harvested cedar trees were used in the construction of the elevated station building to create a symbol of the city's local character. The structural columns were spaced out to create a multi-purpose space underneath the tracks. A park and outdoor stage were also created on the west side of the building, resulting in a high-quality public space connected to the station where local citizens hold various events on weekends. Land re-adjustment enabled the city to construct arterial roads in the area around the station, as well as the consolidate land within the entire dis-

trict. With this, they created space for alleys and a parking lot, thereby improving visitor convenience and the appeal of the commercial district.

During the planning process, a conference of urban design experts was established to ensure a consistent, uniform design, and incorporate the opinions of users gathered through various conference discussions. In addition, extra-curricular classes for elementary, middle, and high school students were staged as a way of educating the next generation of leaders about town planning.



Compact city planning focused on the station and plaza area



The park has become a place for local residents to relax



Town planning class for high school students



The outdoor stage is built from plentiful local cedar



New retail stores facing the street revitalized the area



Private development, including apartments, followed the reconstruction of the station and plaza

H Y U G A M I Y A Z A K I



Muroran Green Energy Town Concept

PROJECT ENTITY: City of Muroran
LOCATION: Muroran, Hokkaido

“ Background and progress

Muroran, a city located roughly 90 kilometers from Hokkaido's main city of Sapporo, flourished as a manufacturing center whose steel industry attracted advanced technology and human resources, logistics infrastructure, and research and development organizations. In recent years, the city has leveraged this industrial base to promote environmental industries and encourage the development of a resource-recycling and low-carbon city. After discussions

with companies, universities, and local groups, in 2015 the city government launched the Muroran Green Energy Town Concept, with the goals of fostering environmental industries, revitalizing the local economy, and realizing a low-carbon city. Public, private, and academic organizations are collaborating on the vision, which calls for doubling the amount of green energy (hydrogen, renewable & unutilized energy) from 2012 levels by 2020.

About the project

The city government is investing in the use of hydrogen energy, including deploying Hokkaido's first mobile hydrogen station and fuel cell vehicles in 2016, as well as installing household fuel cells at a municipal heated swimming pool, making it possible to provide electricity and heat even during power outages. Government and industry are collaborating to bring about a hydrogen society, with private businesses engaged in manufacturing and developing advanced components for hydrogen stations, and designating some residential areas where all houses have household fuel cells. Moreover, to promote the use of renewable energy, Muroran

has added wind and solar generation to public facilities, created a biogas generation facility at a wastewater treatment plant in cooperation with a private company, and is planning to start one of the largest biomass power generation plants in Japan in 2020. In addition, to promote energy conservation, the city has pursued the conversion of streetlights to LEDs, starting with the illumination of the Hakucho Bridge, which is a central element of the nighttime industrial scenery popular with tourists. The city also provides support to families to jointly adopt fuel cells, solar power generation, home energy management systems, and LED lighting.”



Illumination of Hakucho Bridge uses wind-powered LED lights



Mobile hydrogen station and fuel cell vehicles



Municipal swimming pool equipped with household fuel cells



Residential area with fuel cell-equipped homes



Biomass power generation plant fueled by palm kernel shells is planned to start operation in 2020 (Photo courtesy of Muroran Biomass Power Generation G.K)



Kashiwa-no-ha Smart City

PROJECT ENTITY: Mitsui Fudosan Co., Ltd.
LOCATION: Kashiwa, Chiba

Background and progress

The Kashiwa-no-ha Smart City district is located in suburban Tokyo around the Kashiwa-no-ha Campus Station on the Tsukuba Express rail line, which opened in 2005. Coinciding with the completion of the rail line, the 300-hectare site was subdivided and private developers have since constructed more than 1,800 residential units, large shopping facilities and hotels to accommodate a population planned to

eventually reach 26,000.

The smart city is a platform for public-private-academic partnerships that are working towards developing solutions to the challenges of environmental resources, energy, and aging, under the three themes of "environmental-symbiotic city," "a city of health and longevity," and "a city of new industry creation."

About the project

As an environmental-symbiotic city, each home in Kashiwa-no-ha Smart City is equipped with automatic appliance control functionality (Kashiwa-no-ha Home Energy Management System), while the entire area has a next-generation "smart grid" (Kashiwa-no-ha Area Energy Management System), enabling efficient energy storage, CO2 reduction, and electricity availability after disasters. In addition, health support and disease prevention facilities are located within the shopping

center, and walking paths and walking clubs reflect a city committed to encouraging health and longevity.

Finally, to achieve a city of new industry creation, a private company has opened one of the largest co-working spaces in the country, and Tx Entrepreneur Partners, a private venture capital organization, is engaged in cultivating startup companies.



The Gate Square commercial center and residential buildings at the center of the district



Energy management system



KOIL Factory digital manufacturing workshop



"To-mor-row" health support center



Retention basin integrated into park space



KOIL Park co-working space

K A S H I W A C H I B A



Otemachi, Marunouchi, and Yurakucho Area Management

Sustainable development projects in the area around Tokyo Station

PROJECT ENTITY: The Council for Area Development and Management of Otemachi, Marunouchi, and Yurakucho (General incorporated association), OMY Area Management Association (Non-profit corporation), the Ecozzeria Association (General incorporated association)

LOCATION: Chiyoda, Tokyo

“ Background and progress

The district located between Tokyo Station and the Imperial Palace is the center of Japanese business, with around 4,300 offices located in an area of 120 hectares. Many office buildings that were constructed during the high-growth period had grown functionally obsolete by the late 1980s, and the office-only district was deserted on weekends. In order to resolve these problems, stakeholders came together to coordinate the redevelopment of the area. Together with the redevelopment of older buildings, various steps have been taken to increase the area's charm, including adding retail and cultural spaces on the lower floors of office buildings, and expanding the sidewalks along the area's central north-south axis, Marunouchi Naka-dori Street, to enrich

the pedestrian experience.

The Council for Area Development and Management of Otemachi, Marunouchi, and Yurakucho was founded by area landowners in 1988 and has been proactively engaged throughout the development process. In 2000, discussion between the council and local governments led to the establishment of guideline, which defined the area's vision, rules and development methods. Each landowner has redeveloped individual buildings according to the guideline, introducing new urban functions, developing underground circulation networks, beautifying streetscapes, and investing in disaster preparedness. The area management organization also works to increase the district's vitality through various events in public spaces.

About the project

Area management is intended to increase the district's charm and vitality. Marunouchi Naka-dori Street is closed to vehicle traffic from midday until evening and turned into a space for people with food trucks and tables. In addition, the area management organization manages street events to activate public spaces, and reinvests the proceeds into the area's activities.

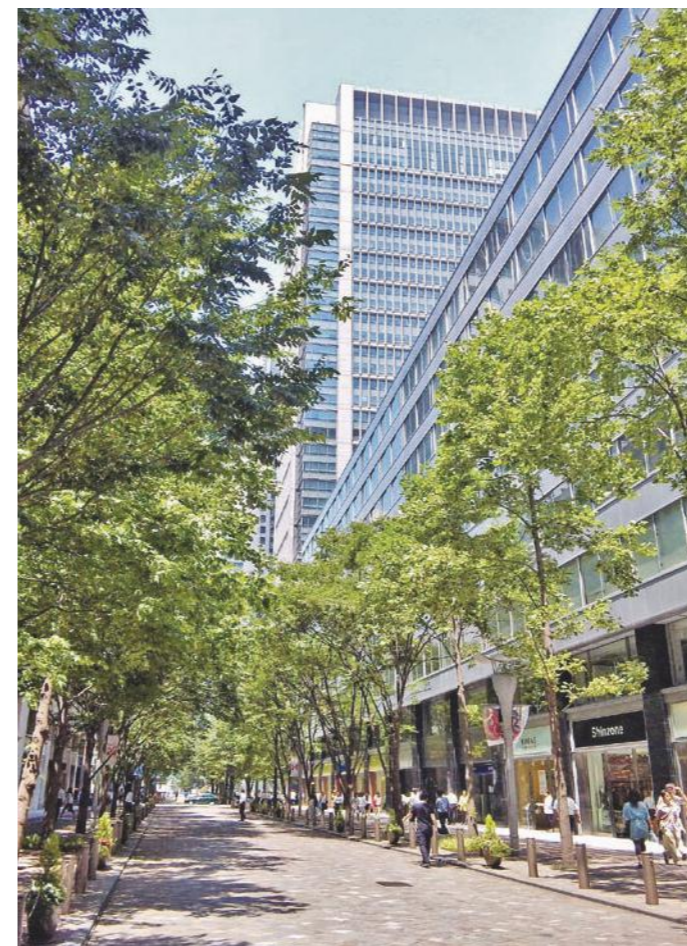
Area-wide efforts are also being undertaken to increase disaster preparedness. Multiple buildings in the area are disaster preparedness centers, equipped with systems to self-supply

electricity and water and capable of providing temporary refuge to people during disasters, thereby increasing the safety and resilience the entire district. Additionally, the landowners hold frequent study groups together with scholars to research urban disaster prevention.

In recent years, seminar salons and other social spaces have been opened to foster an innovative environment where new ideas and business emerge from professional interaction between companies and across industries.



The office district between Tokyo Station and the Imperial Palace



Lower floors are filled with stores



Seminar & event facility



Urban Terrace pedestrian space on closed street



SMA×ECO TOWN Harumidai

PROJECT ENTITY: Daiwa House Industry Co., Ltd.
LOCATION: Sakai, Osaka

“ Background and progress

SMA×ECO TOWN Harumidai covers 1.7 hectares in the hills of Semboku New Town, located on the border between Sakai and neighboring Izumi. In 2010, the Sakai municipal government laid out a strategy to revitalize the area, and solicited proposals for eco-friendly development on the former site of

a closed elementary school.

Development of the eco-friendly residential district began in 2013, with the chosen private builder installing energy generation and storage equipment on all 65 single-family homes.

About the project

All the homes are equipped with solar energy generation systems and domestic lithium-ion batteries, and the management organization has installed solar panels on shared infrastructure such as the roof of the community center. As a result, the entire area's annual primary energy consumption has been reduced to zero, and electricity is also available during post-disaster blackouts. In addition, electric car sharing and energy visualization has been introduced to increase residents' environmental awareness.

The management organization also works on issues including energy management, cityscape, security, and disaster prevention, including operation and energy visualization of the shared solar generation system, storage of food and fuel, and the installation of benches that can be converted into stoves or toilets during disasters.

Sale of solar electricity and electric car sharing provides the management organization with additional income to sustain its activities besides the management fees collected from residents.



The entire district



Typical street in the development



Shared electric vehicle



Solar energy system on shared facility



Neighborhood management association



Disaster preparedness event



BONJONO District of the Future for Everyone

Share Town Project

PROJECT ENTITY: Jono Hitomachi Net (General incorporated association)
LOCATION: Kitakyushu, Fukuoka

“ Background and progress

Discussions about how to develop the 19-hectare Bonjono district, located north of JR Jono Station in Kitakyushu, Fukuoka, began after the relocation of a Self-Defense Forces camp and the planned reconstruction of a public housing estate resulted in large redevelopment sites. This led to a commitment among stakeholders to pursue a zero-carbon vision, which was codified in urban planning guidelines agreed upon by the Ministry of Finance, the public housing authority UR, and the municipal government.

Plans were made for UR to subdivide the site and private developers to supply 350 single-unit homes and 200 multi-unit homes. As of 2016, the eco-friendly area is under development.

The town management organization Jono Hitomachi Net was also established in 2015 to coordinate local management groups and increase the area's value and appeal through energy management, green management, and town security.

About the project

The Jono Zero Carbon Advanced Urban Area is one of the major projects of Kitakyushu's Environmental Future City initiative, and is striving for a theoretical 100% reduction of carbon emissions across the entire district. To achieve these goals, the city made agreements with developers requiring energy generation and conservation measures, such as the construction of long-term, high-quality housing and the installation of home energy management systems in individual homes. The city underwrites a portion of the installation costs, and also supports the use of a community energy management system and other practices aimed

at achieving the overall zero-carbon target for the area's new homes.

Town management includes energy management, which makes information about energy use in homes and facilities visible through an online portal; green management, such as making rules about the cityscape and maintaining walking paths and parks; and town security measures including security cameras and patrols. Additionally, various resident-driven events and activities based on the ideas of "co-curating and sharing the town" are held in common spaces such the TETTE Life Workshop community center.



Solar panels installed on houses



The district's community energy management system



Life Workshop community center



Camping event at a local park



Environmental learning event