Toyota Eco-Model City [Toyota City, Aichi]

Overview of the city

- Population: 422,784 (as of Sep. 1, 2015)
- Area: 918.32 km^2
- Land use: 68% forest, 8% agricultural land, 7% residential land
- Main industries: Automotive, agriculture

Vision







Traffic
- Construction of human- and environmentally-friendly public transportation system, etc.

Industry
- Promotion of transition to sustainable plants, etc.

Hybrid
CO_2 reduction target
30% by 2030
50% by 2050

Forest
- Maximization of CO2 absorption amount by strengthened thinning, etc.

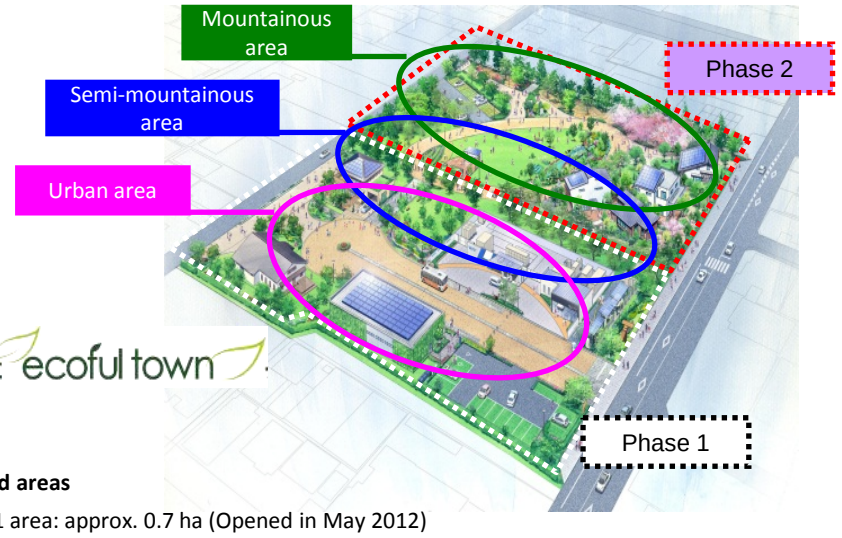
Residential
- Promotion of smart housing, etc.

Urban Center
- Upgrading low-carbon society model districts, etc.

Roles of government, citizens, corporations and other organizations

Roles and responsibilities
Corporations and organizations: Development of advanced eco-technology
Government: Communication and development/familiarization support
Citizens: Promotion of eco-activities

Toyota Ecoful Town has been developed to exhibit Toyota City's low-carbon efforts in cooperation with the private sector. It reproduces the city's regional characteristics on a small scale. Through the experience of the latest eco-technologies, it aims for lateral expansion of eco-activities. The facility has been visited by about 150,000 people from 80 countries worldwide.



Planned areas
Phase 1 area: approx. 0.7 ha (Opened in May 2012)
Total area: approx. 1.55 ha (Completed in April 2014)

Symbolic facility of City's activity

Overview of characteristic efforts

Development of low-carbon transportation system

Leveraging its characteristics as a city of automobiles, the ultra-compact EV-sharing system, "Ha:mo," that supplements daily movement paths between public transportation systems, such as rail and bus, and destinations, has been introduced in the city at the initiative of Toyota Motor. As of September 2015, there are 40 rental stations within the city.

Since October 2014, a demonstration experiment anticipating global deployment has been run in Grenoble, France

International conference cohosted by the United Nations and Toyota City

The High-Level Symposium on Sustainable Cities: Connecting People, Environment and Technology was co-convened by the U.N. and Toyota City from January 15 to 16, 2015.


Lively discussions were made on issues such as the environment, aging and disaster preparedness.


During the "Toyota International Environment Week," from January 10 to 18, various events that promote people's understanding of the environment were held.


Promoting local production for local consumption of renewable energy with tax reduction and various subsidy programs.

Toyota City Eco-tax reduction
(1) Smart house tax reduction (first in Japan)
Partial exemption of property tax, etc.
(2) Renewable energy plant tax reduction (first in Japan)
Partial exemption of property tax for power plants with an output of 10 to 2,000 kW
(3) Electric light vehicle tax reduction (first in Aichi)
Full tax exemption for the light EV and ultra-compact EV

Toyota City Eco-Family Subsidy
(1) Solar power system
(2) Fuel cell system
(3) Next-generation vehicle (including charging facility and external power supply system)
(4) Home Energy Management System (HEMS)
(5) Li-ion battery system for home use

Granting Eco-Point
Points are granted for using the Oiden bus(community bus), visiting eco-facilities (Ecoful Town, etc.), and participating in urban-rural exchange events, etc.


PET bottle recycling

Exchanging Eco-Point
Amassed points can be exchanged for a variety of goods, such as eco-products (waste bags, Oiden bus tickets), gift certificates, and Toyota's specialties, and for participation in rural experience and exchange activities.

Eco Family Card

Contact

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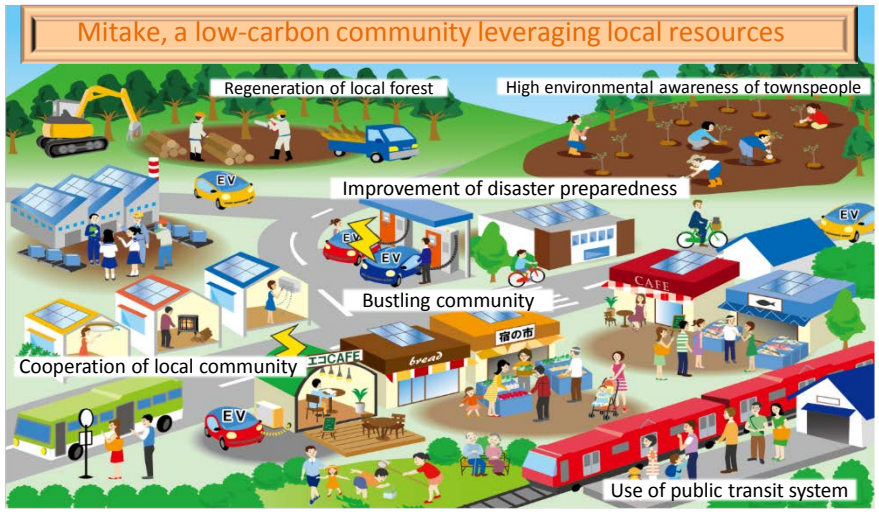
Mitake Eco-Model City [Mitake Town, Gifu]

Overview of the city

- Population: 18,825 (as of Aug. 1 2015)
- Area: 56.61 km^2
- Land use: Approximately 60% forest
- Main industries: With the improved access owing to the newly constructed loop road, establishment of corporations (mainly manufacturing) is increasing.

Vision



Roles of government, citizens, corporations and other organizations


▲Forest development by corporation


▲Use of public transit system


▲Use of renewable energy

▼Making green curtains

▼Environmental education

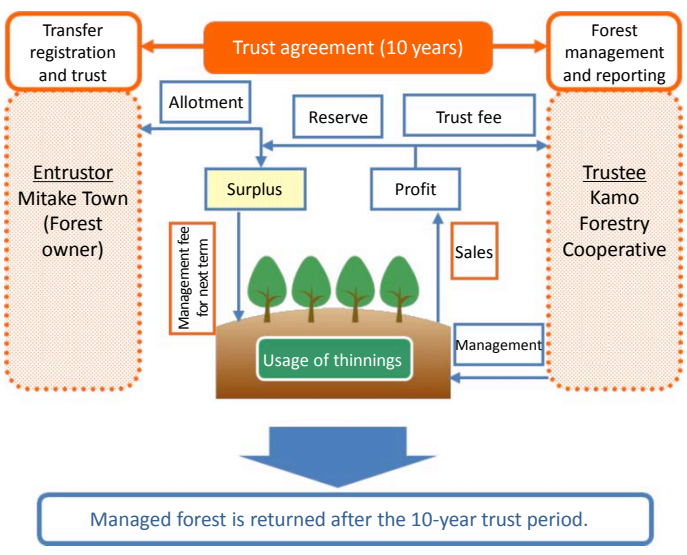
To realize our vision of Eco-Model City, we promote use of public transit, energy-saving activities at home, reduction of waste, etc. through coordination and collaboration among townspeople, corporations and government.

Overview of characteristic efforts

▼Forest area that shares 60% of the total town area

▼Forest development by the entrusted operator

▼Site of forestry experience in cooperation with Shimokawa Town



Promotion of sustainable forest management model (Entrusted forest management)

Mitake Town is blessed with a forest that shares about 60% of the town area.
To utilize the forestry know-how of the private sector, and to achieve proper management and effective use of the town's forest, we have adopted the entrusted forest management method that requires no public expense.
Establishment of a sustainable forest management model is helping to reduce CO_2 emissions, create new jobs, and cultivate human resources through collaboration with the town's forest volunteers.

Contact

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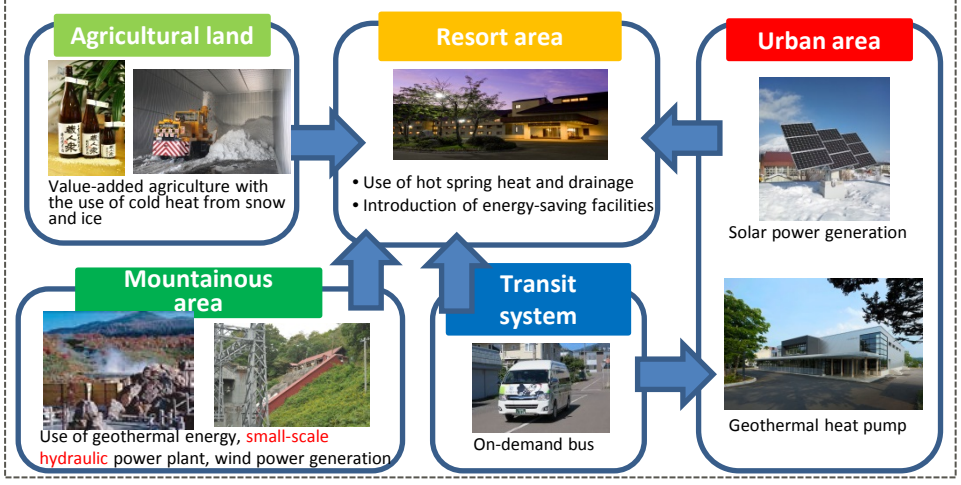
Niseko Eco-Model City [Niseko Town, Hokkaido]

Overview of the city

- Population: 4,886 (as of the end of Jun. 2015)
- Area: 197.13 km^2
- Land use: 46.8% forest, 20.2% wilderness, 14.4% agricultural land, 1.2% residential land
- Main industries: Tourism, agriculture

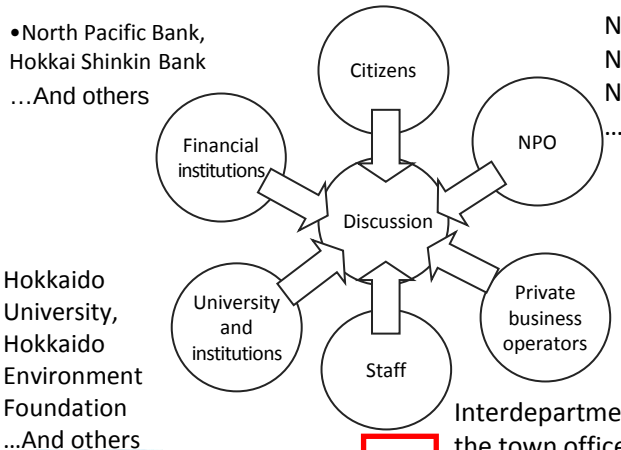
Vision

International eco-resort city Niseko



Roles of government, citizens, corporations and other organizations

The concept behind the promotion system and business promotion strategy




Green house experiment with geothermal heating

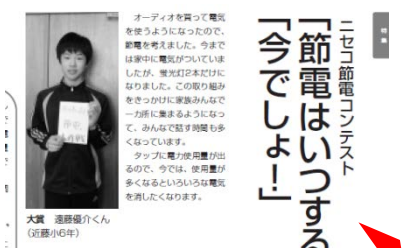

Business model research and real-world testing

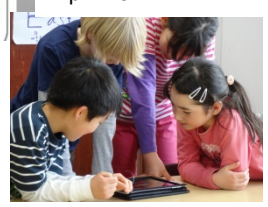

Compost center


Final waste disposal site

Overview of characteristic efforts

Grass root efforts from home

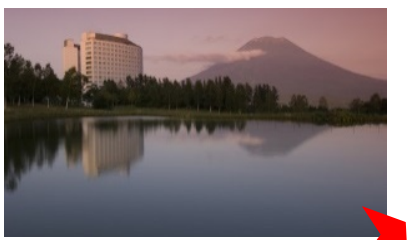

ニセコ節電コンテスト
「節電はいつするの?」
「今でしょ!」
大賞 遠藤優介くん (近藤小6年)
Niseko newsletter April 2014


International school

- Adding incentive through information about energy cost savings
- Eco-school, education of residents
- Optimization of school bus and on-demand bus, and introduction of eco vehicle (with examination of civil or corporate financing)

Residents +

Energy-saving and use of renewable energy in tourism business

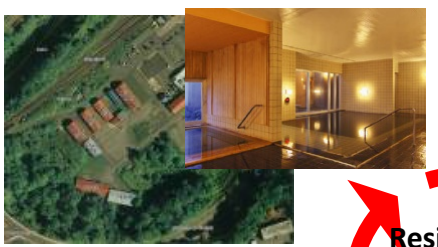

Large tourist hotel (including foreign investment)


Ski area illumination

- Active utilization of hot spring heat and drainage
- Introduction of energy-saving or renewable energy systems to tourist facilities
- New special-purpose tax levied on visitors to help eco-activities
- Reducing CO_2 by implementing emission regulations

Residents Facilities +

Energy transformation (commercialization of renewable energy, etc.)


Warehouses in front of the station and Kiranoyu Spa


Hydraulic power plant in Niseko town

- Energy supply model area combining ground heat, hot spring heat and geothermal energy
- Procurement of electricity from the hydro power plant run by a local private company
- Formation of locally led renewable energy supply organization

Residents Facilities Capital

Low-carbon emissions compatible with sustainable development

Contact

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Oguni Eco-Model City [Oguni Town, Kumamoto]

Overview of the city

- Population: 7,632 (as of May 1, 2015)
- Area: 137 m²
- Land use: 78% forest
- Main industries: Agriculture, forestry, tourism

Vision

Local development leveraging abundant geothermal and forests

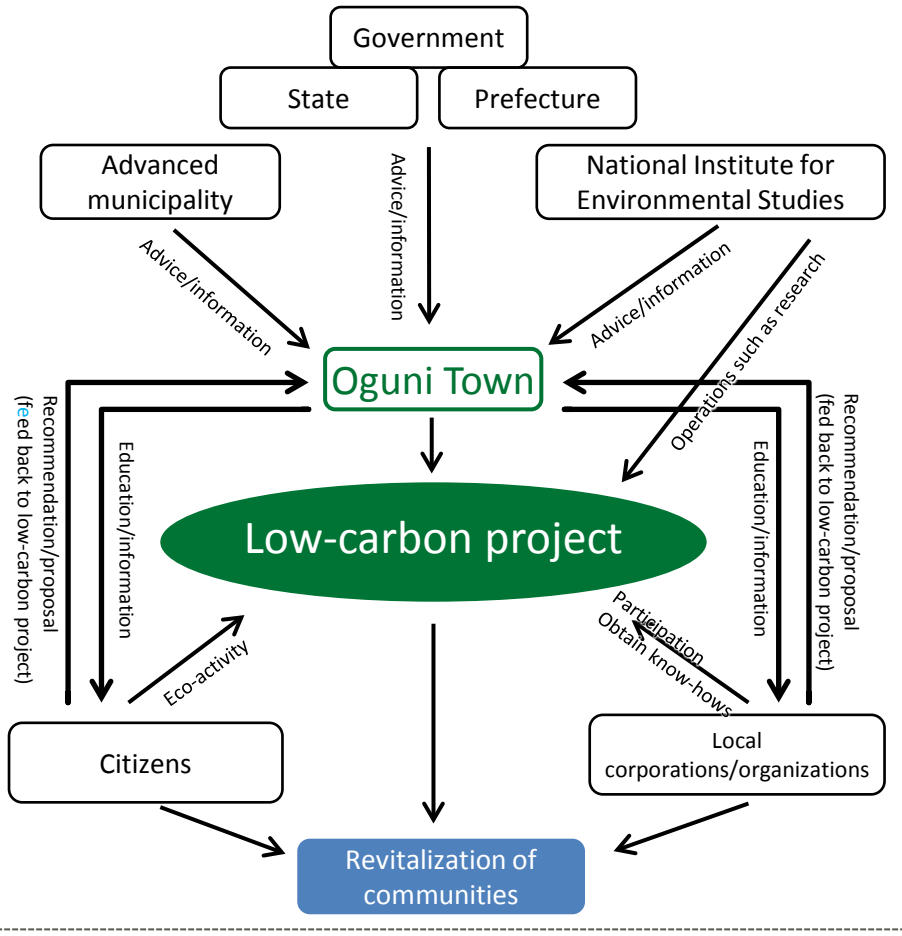
Low-carbon project

Local development

Agriculture | Forestry | Tourism

(Agriculture and forestry town plan leveraging geothermal and biomass)

Roles of government, citizens, corporations and other organizations



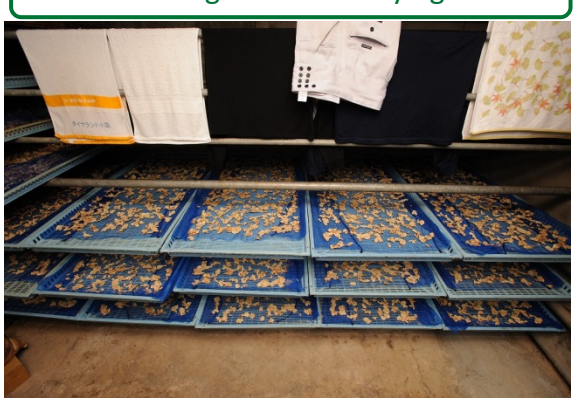
Overview of characteristic efforts

Geothermal lumber drying facility

This facility uses geothermal upwelling from the ground to dry lumber. Currently 14 lumber driers have been constructed. This ecological method, requiring no fossil fuel, allows timber to dry slowly compared to other methods, thus putting less burden on the timber and achieving a true color and luster.

Applying this method ...

Traditional geothermal drying cabin



In Waita Area, Oguni Town, people have traditionally made use of geothermal for various purposes such as cooking, heating and hot-water supply, and it has become rooted in their local life. This geothermal drying cabin is used for drying washed clothes and, at the same time, for drying crops.


Geothermal hot-water supply


Geothermal *kotatsu*, a leg warmer


Geothermal heater

Contact

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