


Energy-saving measures in Sapporo city

eco capital Sapporo

SAPPORO

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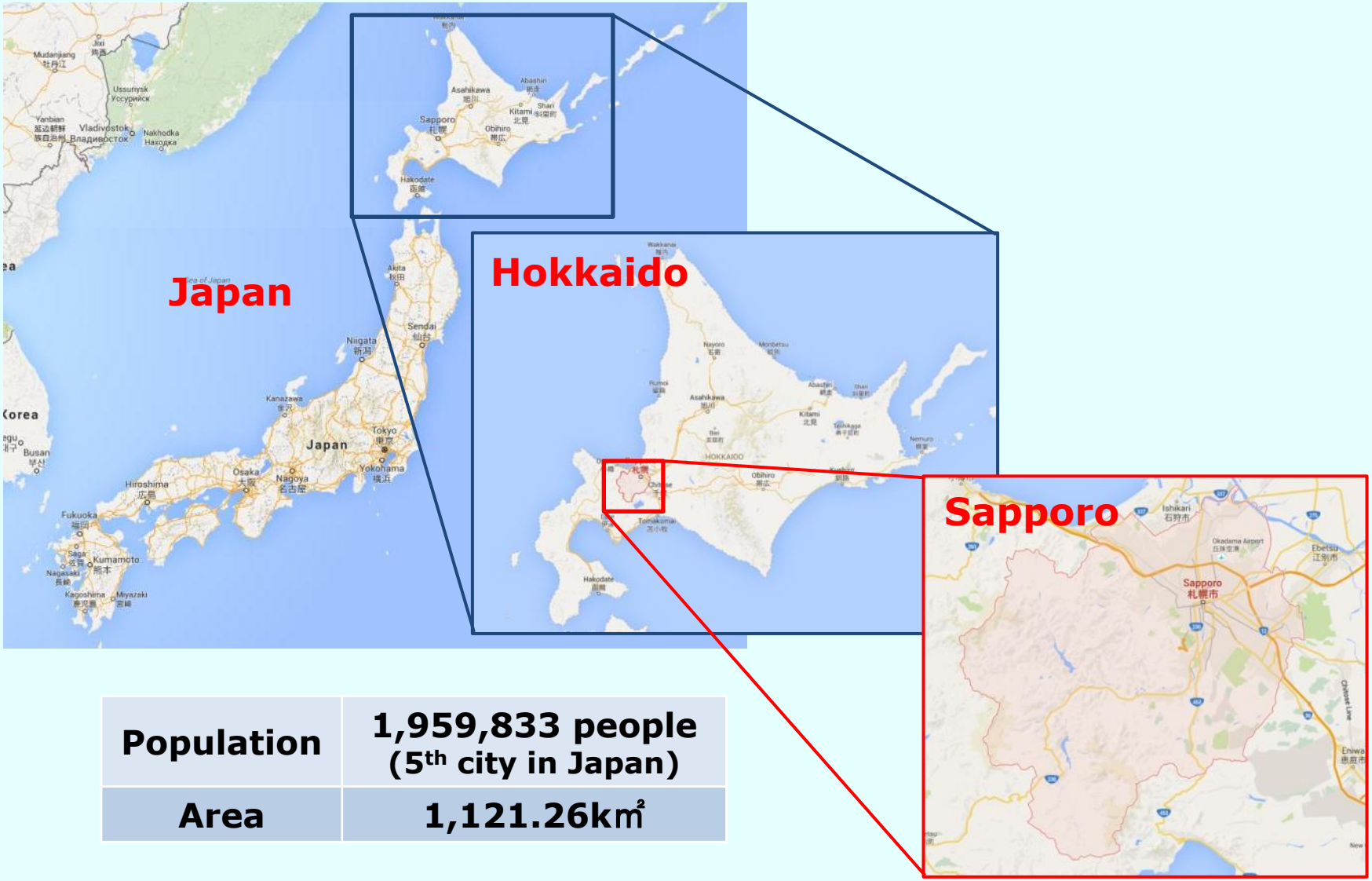
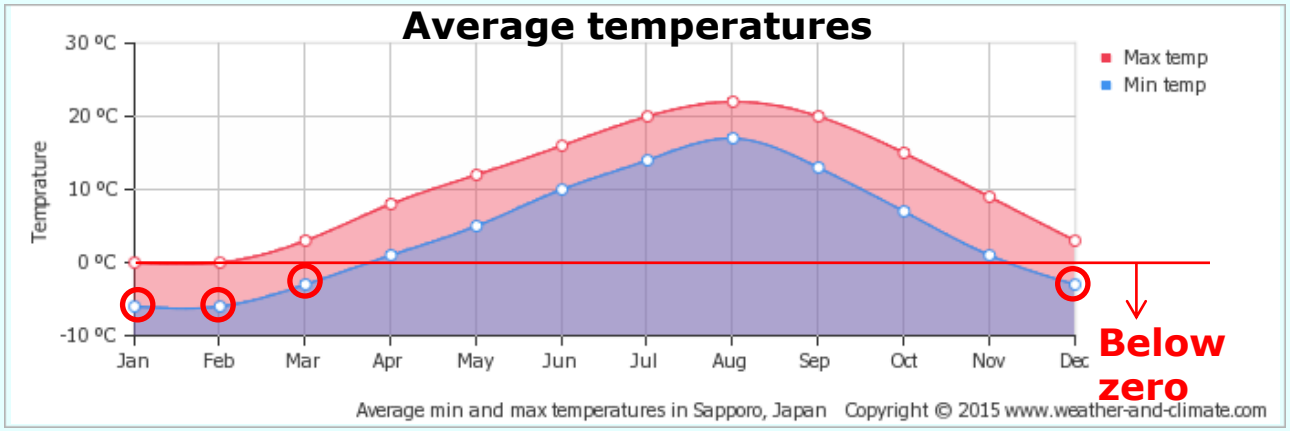
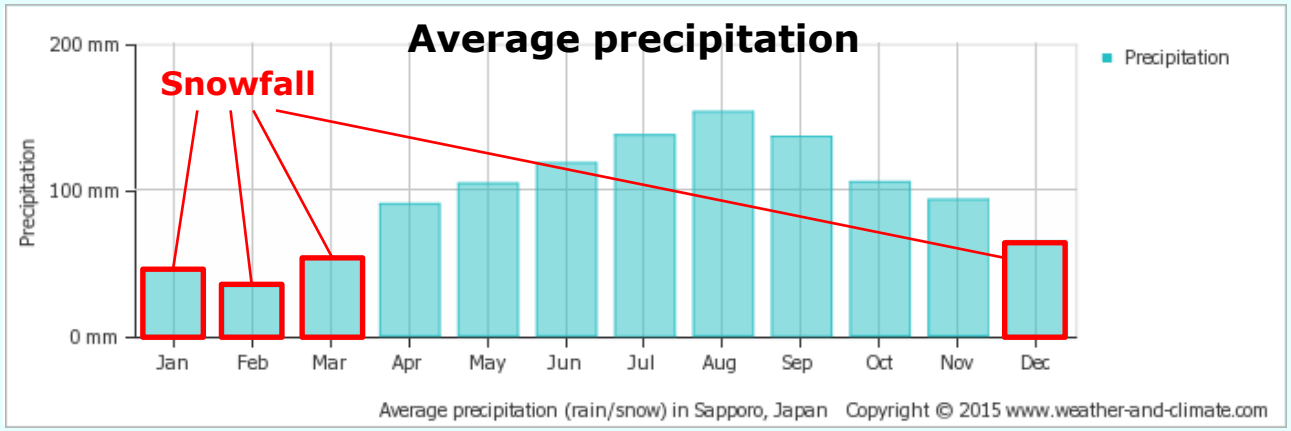
Sapporo's Location



Population	**1,959,833 people (5th city in Japan)**
Area	**1,121.26km²**

Average temperatures and precipitation





Average snowfall
:about 5m in a winter

The Cityscape of Sapporo

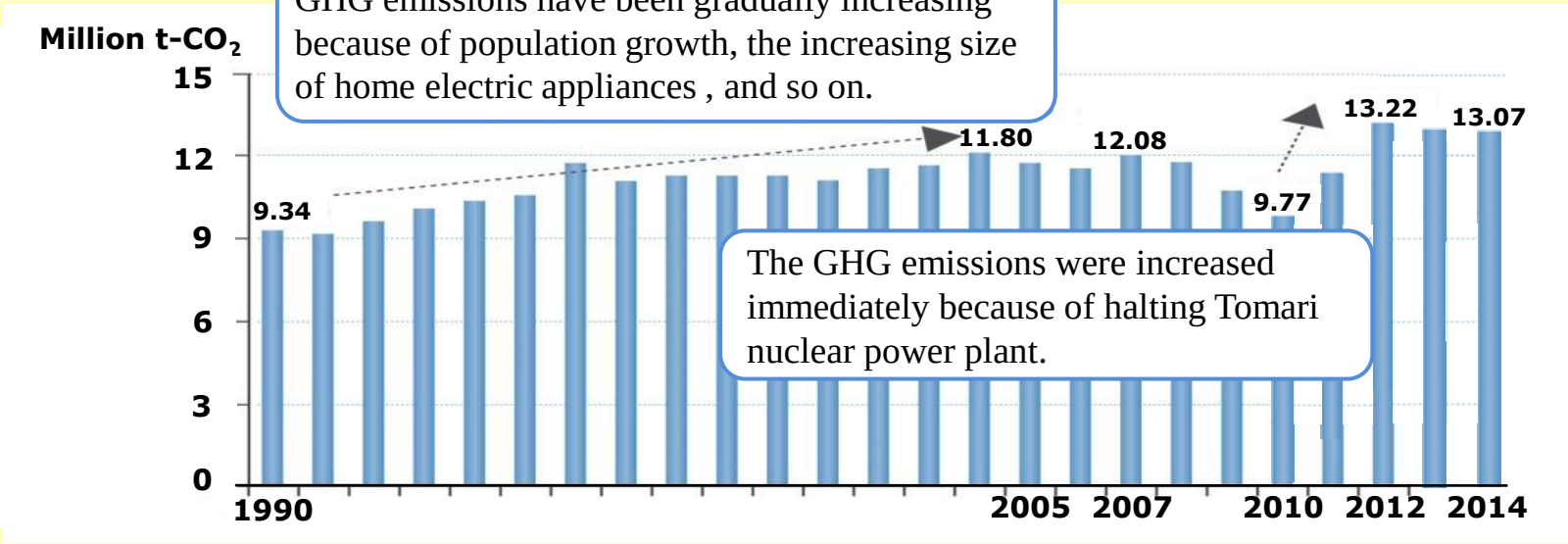


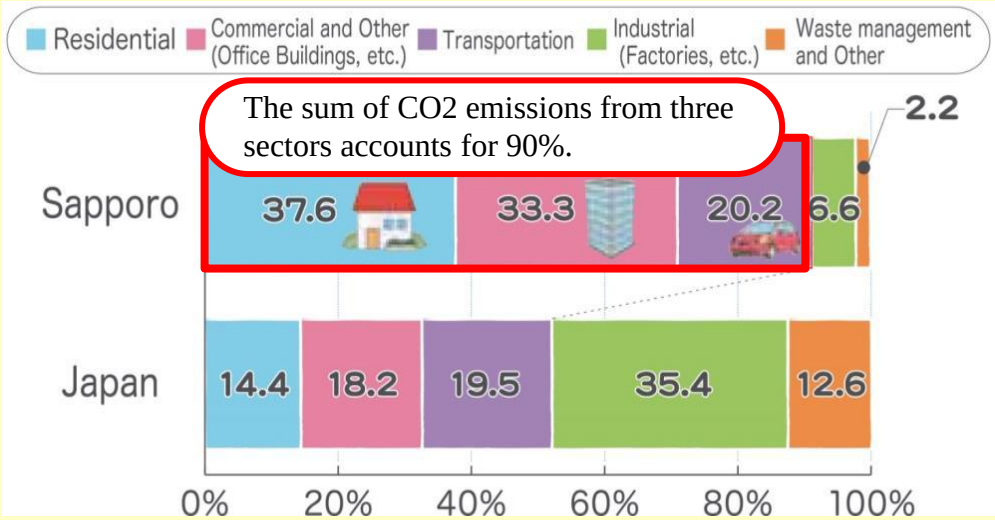


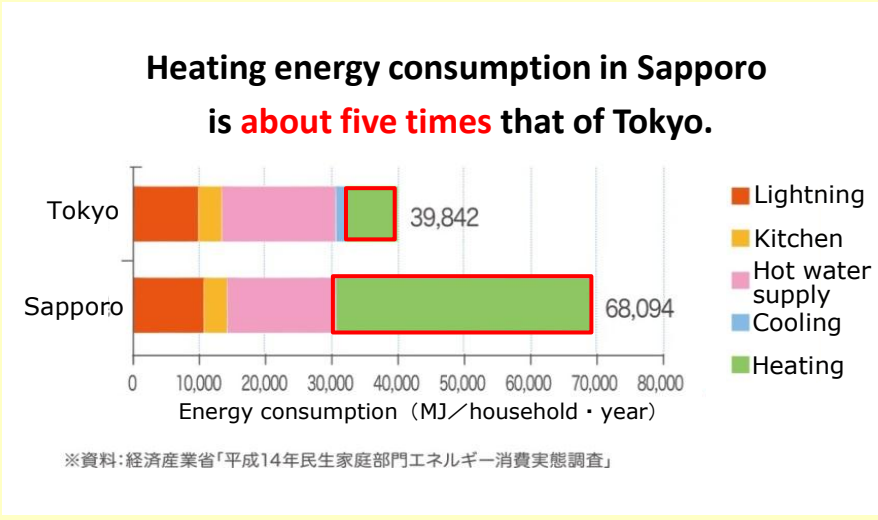

Oct. 27th 2016 workshop of project formulation study
thorough city to city cooperation in Ulaanbaatar,Mongolia

Greenhouse Gas(GHG) Emissions in Sapporo

GHG emissions have been gradually increasing because of population growth, the increasing size of home electric appliances , and so on.







Sapporo Smart City Project

◆Concept ~ “From Saving to Enjoying”

The objective is that the City of Sapporo will become a “smart city”, where everyone has a “smart life” ,meaning conserving energy smartly, enjoyably and without waste .

Logo

Posters of promotion

We used Mr. Akimoto, Mayor of Sapporo and Ms. Tanaka, the Japanese popular model living in Sapporo as the messengers to make energy conservation appealing.

●Talk show

●Leaflet

●Fan

●Tissue

Sapporo Energy Eco Project

A support system for city residents and small/mid-sized businesses toward the introduction of new-energy and energy-saving equipment

→ Promotion to encourage the introduction of units for the generation of solar energy and other types of power

○ **For city residents**

- **Eco Subsidies: five calls for applications in fiscal 2016 (six if funds permit)**

***Subsidy amounts depend on target equipment (solar power: 45,000 yen/kW, up to 180,000 yen)**

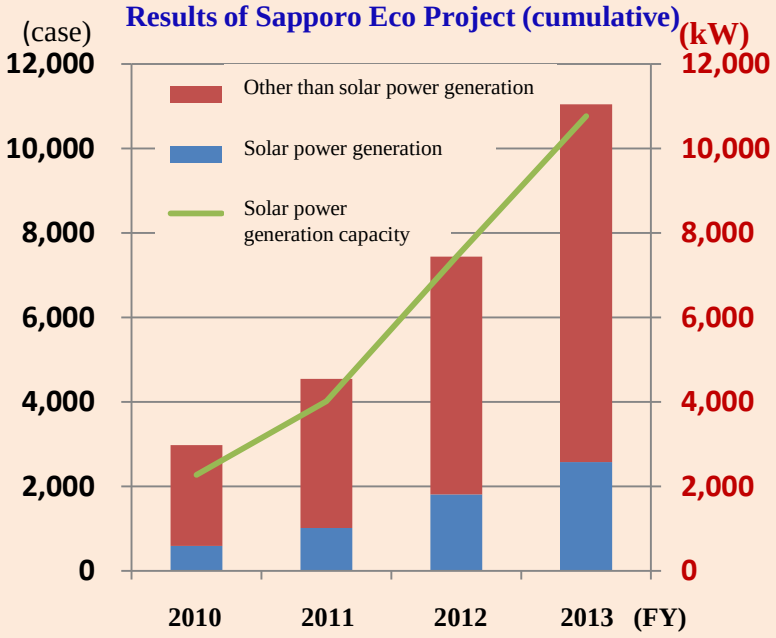
○ **For small/mid-sized businesses**

- **Eco Subsidies: granted to all applicants responding to six calls for applications in fiscal 2016**

***10% of construction costs (at least 1 million yen excluding tax); upper limit: 1.5 million yen**

Examples of target equipment

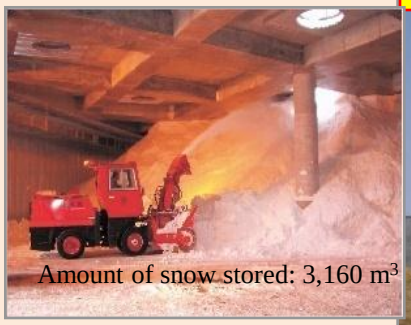
(Woody biomass)

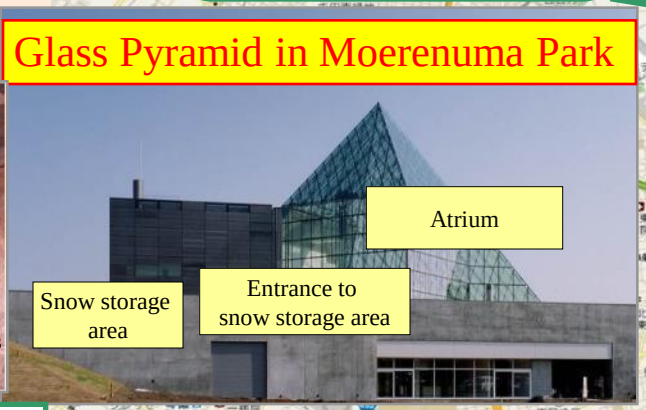


The efforts for renewable energy

Snow-based cold energy

Glass Pyramid in Moerenuma Park





Snow stored in winter is used for air conditioning in early spring to summer.

Waste-based power generation

Shiroishi Incineration Plant

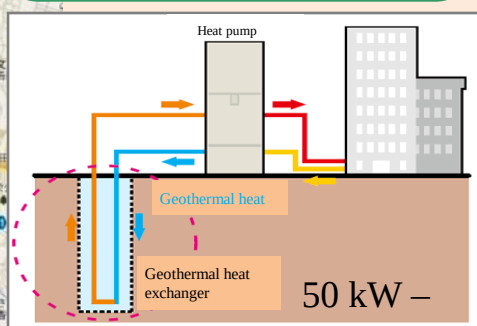
Power output: 30,000 kW
Collected waste is used as fuel to generate enough electricity for approximately 40,000 households.

Small-scale hydroelectric generation

Small-scale hydroelectric generation at Moiwa Water Purification Plant

An electricity-generating hydroelectric station has also been combined with a water purification plant.

Use of geothermal energy



Use of a geothermal heat pump to reduce cooling and heating loads

Nishioka Fire Station, etc.

Support for next generation automobiles & A project for establishing eco-driving habits

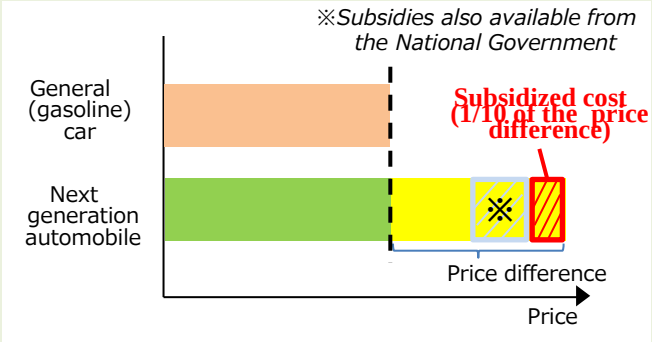
Project supporting the introduction of next generation automobiles

	Number of automobiles owned	Next generation automobiles
City-wide	About 1,000,000	About 70,000
Official vehicles	About 1,700	About 220

(As of March 2016)

- The City of Sapporo will bear part of the cost for citizens and business operators purchasing EV, HV, PHV, NGV or similar models under this support system. (Only purchases of EV, PHV are applicable to citizens)
- 10% of the difference in cost between general cars and next generation cars will be subsidised.

※The difference in cost varies by car type.
(Calculations are based on the national public prices)



Establishing Eco-driving Habits Promotional Project

We promote eco-driving habits in citizens and businesses by holding workshops, simulation experiences to learn about the effectiveness of eco-driving, and advising one's driving habits after a diagnose and analysis.

Eco-driving workshop

Experiencing the effectiveness of eco-driving

Advising after a diagnosis & analysis of driving habits

Reference：

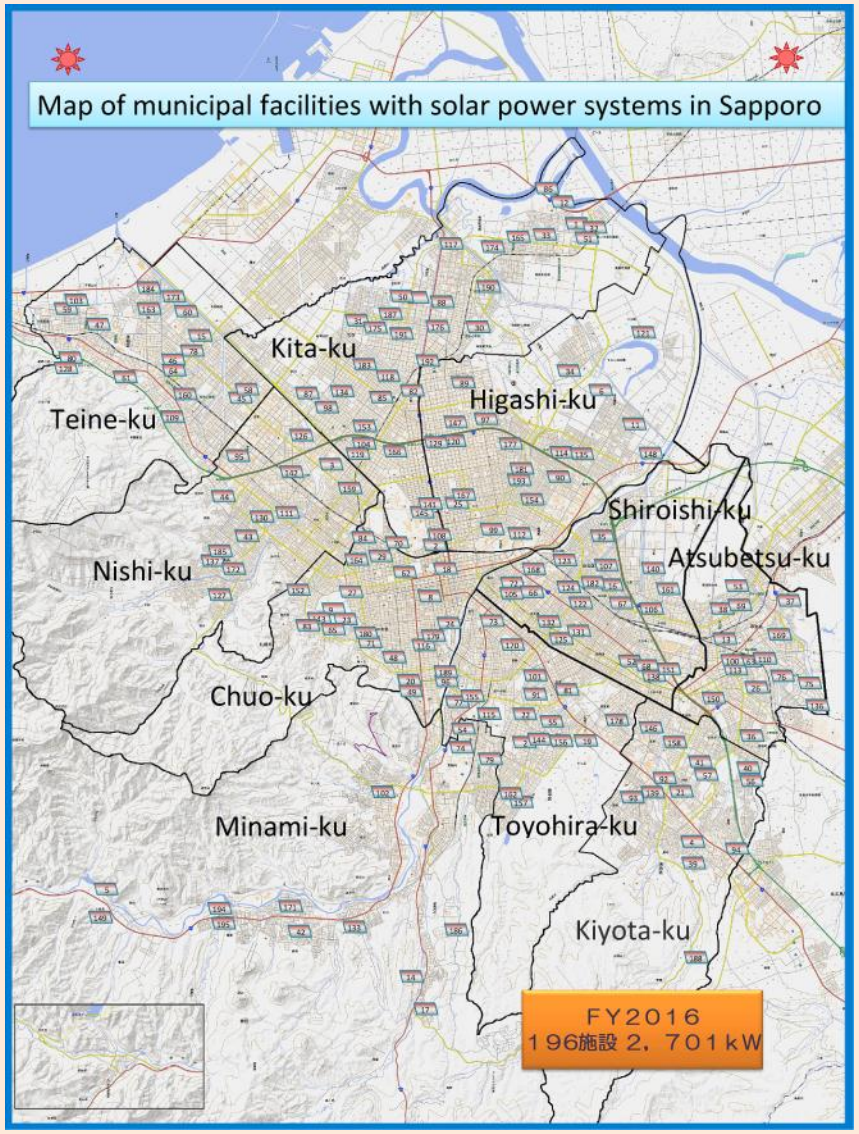
Solar power system installation at municipal facilities

A program of solar power system installation in municipal facilities has been run since 1998 to introduce, encourage the spread of and promote renewable energy and to enable the use of these systems for environmental education.

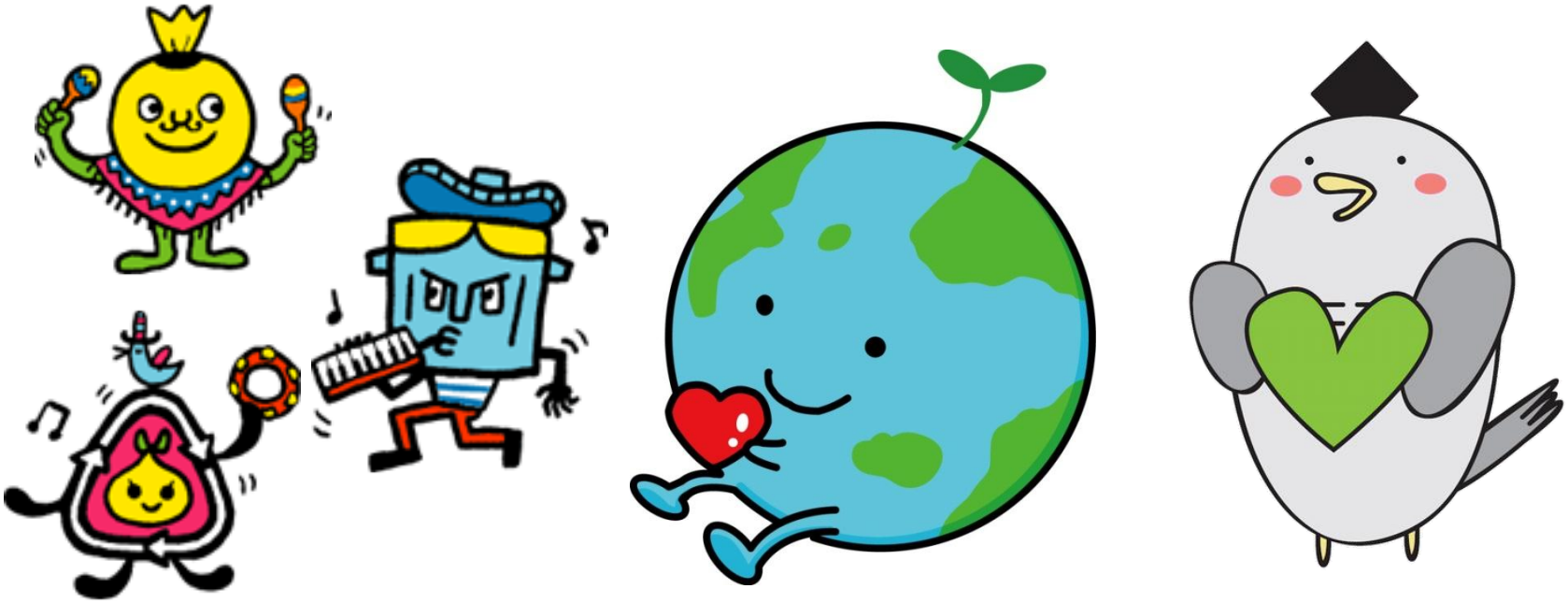
As of the end of FY 2015, systems had been installed in 196 municipal facilities including 149 schools.

*Total generation capacity: approx. 2,701 kW

In FY 2015, solar power systems were installed in 14 facilities, the Kitashiroishi Liaison Center and 13 schools.



Thank you



The environmental characters in Sapporo