



Sakai Photovoltaic Generation (10 MW)

Sakai City is promoting initiatives to realize Cool City Sakai, a low-carbon city in which a Comfortable Life and Bustle of the City are sustained.

As Sakai has long been referred to as “everything starts in Sakai,” the city has the characteristics of constantly challenging and creating new things. The city inherits such characteristics and promotes efforts as a pioneering low-carbon city in which the environment and industries will be balanced and developed together.



J-GREEN Sakai (Japan's biggest photovoltaic generation for a sports facility including soccer)

A Project to Create Harumidai Eco-Model Town

The city will realize a Net Zero Energy Town in the entire urban area by realizing the Net Zero Energy House (ZEH) in houses in all of the 65 plots.[Characteristics of the Project]

- With the introduction of photovoltaic power systems, residential lithium-ion cells, lithium HEMS, etc. to all the houses, the city will realize ZEH.
- With the use of photovoltaic power systems and large lithium-ion cells to be installed in the meeting places, etc., the city will realize self-sufficient in the electricity used in the communal areas (LED street lights, etc.).
- The city will develop a disaster-resistant city with a power feeding system [V2H] for meeting places in which EVs are used for car-sharing, lay electric lines underground, etc.



EVs shared at meeting places

Picture of the current state

Project for the Compound Use of Recycled Sewage Water

The city has been engaged in a project for the compound use of recycled sewage water, which utilizes water treated by a sewage plant (“recycled sewage water”) as heat and water sources at AEONMALL Sakaiteppocho.

About 1500 m³ per day of recycled sewage water is sent to the shopping mall from the Sanbo Sewage Plant, which stands about 2.3km away. Since the temperature of recycled sewage water is about 15°C in winter and 25°C in summer, the gap in the temperature of the water and the temperature of outdoor air can be used as a heat source. The recycled water is used as a heat source to supply hot water in the facility and then is reused as a heat source for air conditioners. The city expects such use will reduce 3.5% of annual energy consumption and 7.5 tons of CO₂ emissions. After being used as a heat source, the recycled sewage water is used as flush water for toilets in the facility and as a water source of the Seseragi Water Channel in the Uchikawa Green Area.



The system for using heat source at AEONMALL Sakaiteppocho

Seseragi Water Channel, Uchikawa Green Area

Management of a Community Cycle System

Community Cycle is a low-carbon transportation system which uses eco-friendly bicycles that do not produce greenhouse gases.

Currently, the city allocates 690 shared bicycles (640 bicycles and 50 power-assisted bicycles) at 8 Cycle Ports (exclusive parking spaces) in the city. By shifting from the use of cars and reducing CO₂ emissions, this system contributes to the development of an environmentally friendly city. In order to achieve the shift to public transportation and bicycles, the city will continue to promote the use of the system by such means as increasing the number of shared bicycles.

- Lend and return can be made at any Cycle Port.
 - In case of fixed-term use, you can take the bicycle home.
 - User-friendly low charges and no maintenance of the bicycle needed
- (300 yen per day and 2,000 yen per month)



Cycle Port Plot Plan



Top picture: South Exit of Sakai-Higashi Station (Rack type: 24-hour use)
Bottom picture: In front of Sakai-Higashi Station (Gate type)