Promoting Obihiro as an Environmental Model City

Obihiro City



Background

Based on the Obihiro Basic Ordinance on the Environment, which came into effect in April 1997, the city of Obihiro drew up the Environmental Basic Plan in March 2009. The basic plan, which maps out long-term comprehensive indicators on medium-to-long-term environmental conservation, is regarded as superior to individual environmental programmes and a wide range of related projects. Aiming to create a low-carbon society that tackles the urgent challenge of preventing global warming and at the same time promotes community revitalisation, the city drew up the Obihiro

Environmental Model City Action Plan in 2009, under which citizens, businesses, universities, administrative offices and other members of the society work together. The action plan entered its second phase in fiscal 2014.

Purpose of Project

- Achieve a low-carbon society that pushes ahead with measures to curb global warming and at the same time promotes community revitalisation.
- Create a comfortable city environment that is rich in nature and also highly liveable, with abundant water and clean air. Further develop dynamic agriculture, forestry, and livestock industries that are in harmony with the environment and contribute to the region.
- Conduct environmental education at schools, neighbourhood associations and offices and expand volunteer activities by citizens to encourage more environmental lifestyles.

Outline of Project

In Obihiro, carbon dioxide (CO2) emissions from households, businesses and related sectors, and the transportation sector account for 87% of all CO2 emissions, with most originating from electricity production and fossil fuels.

In response to this situation, the project is aimed at helping environmentally friendly activities in households, businesses and related sectors. Such efforts include supporting the use of renewable energy sources, presenting examples of familiar energy-saving efforts, and making electricity consumption visible in order to boost awareness of the need for energy saving.

For the transportation sector, the project calls for greater use of public transportation, use of fuels originating from biomass in the region and a shift to environmentally friendly vehicles.

In addition, the project promotes the cyclical use of various kinds of biomass that are available in large quantities in Obihiro as by-products of the city's mainstay livestock industry..

Features and Advanced Aspects

- The project promotes the use of photovoltaic power generation systems, to take advantage of one of Japan's longest available hours of sunlight, totalling 2,000 hours annually.
- In one of the most advanced of such initiatives in Japan, waste edible oil is collected and refined into biodiesel fuel (BDF), for use as fuel for local buses, etc.
- Taking advantage of the city's position as one of the leading food supply bases in Japan, the

project transforms livestock excrement and agricultural residues that are generated in large quantities into resources for use as feed or fertilisers, thereby promoting a cycle of resources.



Collection of waste edible oil

Effects of Project

CO2 emissions in the city are believed to have totalled 1,288,000 tons in fiscal 2013, the most recent year for which data are available, down 11.7% from 1,459,000 tons in the base year of fiscal 2000, with the emissions coefficient for the electric power industry fixed at the base year level. The short-term numerical target for fiscal 2018 is expected to be achieved.

Between April 2009 and the end of November 2015, the city provided subsidies for a total of 1,367 projects to install household-use photo-voltaic power generation units. The aid resulted in a CO2 emissions reduction of more than 8,000 tons annually (calculated under the Obihiro Environmental Model City Action Plan).

Under agreements concluded mainly with retailers, the municipal government installed boxes to collect waste edible oil at about 60 locations in the city. With the collected amount per resident among the highest levels in the country, projects to install fuelling equipment, including simplified machines for supplying B5 fuel, or gas oil with BDF content of up to 5%, are being undertaken smoothly not only by the municipal government but by the private sector as well.

The city's mainstay agriculture industry has been implementing specific programmes aimed at reducing greenhouse gas emissions. In one such industry programme, the city of Obihiro promotes an "eco-feed" program for making livestock feed from food waste generated in the food production process, in a bid to reduce food waste and raise self-sufficiency on feed, thereby reducing the use of imported feed and CO2 emissions from feed transportation. Another programme calls for making compost from livestock excrement for use on farmland, in order to raise soil productivity and promote carbon storage in soil.

In the five years from fiscal 2009 to fiscal 2013, CO2 emissions were reduced by more than 90,000 tons, while the value of agricultural production increased by 682 million yen. The results suggest that measures to fight global warming and regional economic revitalisation have been

promoted in a compatible manner. In wide-area collaborations with 18 nearby town and village governments under the Tokachi Settlement and Self-Support Area Initiative and the Tokachi Biomass Industrial City Initiative, Obihiro is promoting the use of biomass in an effort to strengthen industry foundations and revitalise the regional economy.



The livestock industry and the cycle of biomass resources

Problems and Responses •Before Project Implementation

To meet the initial funding needs, the city used subsidies from the national government and attracted financial support by establishing an environmental fund.

After Start of Project

The city is promoting the wider use of photovoltaic power generation systems to make use of its regional attributes, but citizens' interest in the systems has waned markedly after falls in solar power purchase prices under Japan's feed-in tariff system. The reduced interest also reflects media reports that Hokkaido Electric Power Co., the regional power utility, had stopped accepting new electricity sales applications from photovoltaic power generation business operators due to worries that accepting solar power in excess of demand could disrupt the stability of electricity supplies.

The city is looking at how it can provide assistance for citizens and businesses that sell photovoltaic power generation systems, mainly through interviews with such companies.

Outlook

The municipal government expects a reduction in the amount of greenhouse gas emissions in the city and an increase in regional vitality through efforts to fight global warming.

Contact

environment@city.obihiro.hokkaido.jp +81-155-65-4135 The Environmental Promotion Section of the Environmental City Promotion Division, the City of Obihiro