

Kyotango City

Renewable energy creation and development of recycle-oriented agriculture



Situation

- In a region like this city with a long coastline, a rise in the seawater level resulting from global warming is feared to cause significant effects on citizens' lives. Therefore, the utilisation of energy sources that would replace fossil fuel is required.

Intervention

- From food scraps that have so far been disposed of as waste, clean energy (electricity generation) and liquid fertiliser for agriculture are produced for effective local use, with a view to form a sustainable recycling-oriented society that is friendly to the environment.

Kyotango City Eco Energy Centre

-The facility was started business anew as a central facility in the work to build a recycle-oriented society in Kyotango City in October 2009.

The two resources of electricity and fertiliser from waste

-The centre receives food waste from food factories as materials, puts the waste through a methane fermentation process and conducts biogas-fired power generation.

-The key by-product from the methane fermentation after the biogas is procured, called digestive fluid, can be used in agriculture as liquid fertiliser.

Food cycle-related work

-In fiscal 2014, the facility began receiving all food waste from the meal services provided at all nurseries and elementary and junior high schools in the city. At the same time, rice produced with the liquid fertiliser was provided in school meals as part of food cycle-related work.

Impact

- There are rising expectations that biogas power generation equipment with stable energy supply capabilities will play a key role as a base-load electricity resource.
- The management method at the Eco Energy Centre, which procures energy efficiently by using waste as a material, could become a model case of resources recycling.

