

02 Striving for Environment- and Earth-friendly Business Management

Environmental Activities

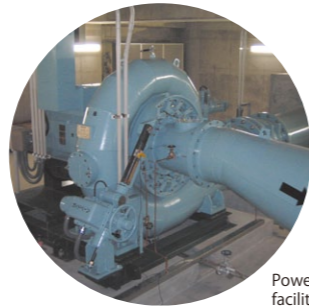
Taking Various Initiatives to Maintain Environment-friendly Water Development and Protect Nature



Solar power generation panels

Solar Power Generation

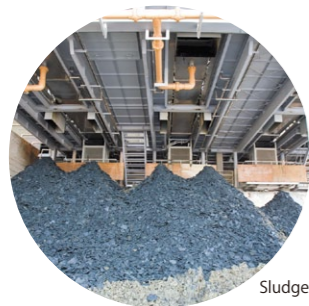
The solar power generation system at the Kunijima Purification Plant has a total yearly output capacity of approximately 480,000 kW per hour (as of fiscal 2013). This capacity is equivalent to the amount of power consumed by approximately 105 general households, which reduces an annual amount of approximately 250 tons of carbon dioxide causing global warming emitted by a thermal plant. The output power of the system is used partly for the operation of advanced water treatment facilities and the operation of emergency water supply pumps in times of disaster.



Power generation facility

Hydroelectric Power Generation

The hydroelectric power generation system at the Nagai Water Distribution Plant utilizes the pressure of water flowing into the service reservoir with a total yearly output capacity 2,010,000 kW per hour (as of fiscal 2013). This capacity is equivalent to the amount of power consumed by approximately 435 general households. The output power of the system is used partly for the operation of facilities, including distribution pumps. This reduces an annual amount of approximately 1,033 tons of carbon dioxide emitted by a thermal plant. In fiscal 2013, the Izuo Water Distribution Plant introduced a hydroelectric power generation system with a total yearly output capacity of 580,000 kW per hour to be all sold, which came into operation in fiscal 2014.



Sludge facility

Sludge Reuse

Sediment produced in the purification process is recycled for use for backfill soil. Furthermore, the Bureau is working with the private sector to develop methods for the reuse of sediment.



Kunijima Purification Plant Administration Building

The new Kunijima Purification Plant Administration Building was designed to be environmentally friendly to feature rooftop gardening, cooling with cool tubes, and energy conservation by cooling heat pumps with water spraying. The surrounding roads are paved with water retaining material.

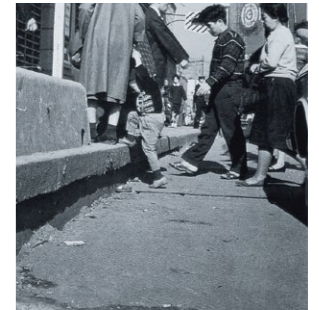


Environmental Accounting

The Bureau employs an environmental accounting system for the quantitative identification in monetary or material terms, and assesses and discloses the costs and results of its activities in environmental preservation efforts. The Bureau has been publishing an annual environmental report since 2003 to promote customers' greater understanding of its conservation activities.

Industrial Water Supply System

The over-pumping of underground water for industrial use was a major cause of land subsidence in the western part of Osaka City around the 1930s. Therefore, the municipal government implemented a program of a new industrial water service to replace the pumping of underground water to prevent further land subsidence. With the completion of the industrial water service, the pumping of underground water was made illegal in December 1968, which almost successfully prevented further land subsidence. The industrial water service has been continuously playing an important role in supporting industrial activities to this day.



Collapsed road due to land subsidence

