### **Ecological Community**

### Taiwan's First "Diamond Level" Ecological Community Green Building Label

The STP, on January 29, was awarded Taiwan's first "Diamond Level" ecological community (for non-residential communities) green building certification by the Ministry of Interior. The members of the evaluation committee were impressed by its friendly infrastructure, environmental protection and ecological conservation, high green coverage rate, and green quality. The three axis directions of "ecology", "energy saving and carbon emission reduction", and "health and comfort" were recognized with the "Diamond Level" as well as the model for national EEWH-EC ecological community.





EEWH-EC Certificate (January 29,2013)

 ISO 50001 Energy Management System Certificate for the Resource Recycling Center(April 12,2013)

# Center(April 12,2013) TAF Accredited Waste Water

Treatment Plant Lab at the KSP

The Waste Water Treatment Plant at the KSP on August 26 was accredited by the Taiwan Accreditation Foundation (TAF). The seven accreditation items included conductivity, pH, chemical oxygen demand (COD), suspended solids (SS), biochemical oxygen demand (BOD), water temperature, and villiaumite level serving as important references for sewer operation management and response to improve the operation efficiency of the waste water treatment system at the KSP and integrated waste water quality control .

## Taiwan's First "ISO 50001" Certified Incinerator

After winning the "2012 Energy Saving Outstanding Performance Award", the Resource Recycling Center at the TSP on April 12 was certified as an ISO 50001 Energy Management System and became Taiwan's first ISO certified waste treatment facility. In addition to the effectiveness of its energy saving and carbon emission reduction programs, it sets an example of the sustainability to Taiwan's waste treatment facilities.



TAF Certificate for the KSP's Waste Water Treatment Plant (August 26,2013)

Water Footprint Certificate for the Environmental Protection Center(October 2,2013)

### Taiwan's First "ISO 50001" Certified Waste Water Treatment Plant

The Environmental Protection Center at the TSP adopted relevant improvement measures to monitor and manage energy use, the electricity system, the lighting system and equipment to reduce energy consumption with outstanding outcomes (electricity used for water treatment for each unit was reduced from 0.526 kWh/ton in 2011 to 0.451 kWh/ton in 2012 for a reduction of 14.3%). On September 12, it was certified as the ISO 50001 Energy Management System.

The Environmental Protection Center on September 27 was accredited for its biological toxicity testing methods (Daphnia and Cichlasoma spp). This enabled the Waste Water Treatment Plant to conduct real-time monitoring and control more effectively in order to assure effluent safety.

The Environmental Protection Center, on October 2, was awarded water footprint international accreditation. Through a water footprint inventory check and the re-utilization of the effluent of the Waste Water Treatment Plant, water resource consumption can be effectively reduced.

## **Green Building and Green Factory Labels**

The STSP, until 2013, had received five green factory labels including P3 and P4 of Fab 14 of TSMC, Fab 12 of UMC, STSP Plant 1 of Delta, and Plant 3 of Innolux, making the STSP the location of the highest density of green factories in Taiwan. Additionally, by 2013, at the STSP, there were ten EEWH diamond green buildings, accounting for 1/4 of the total green buildings in Taiwan, making the STSP the location of the highest density of diamond green buildings.







### **Promotion of Green Transport**

The free shuttle bus services provided at the TSP meet the demand for seamless transportation between the TSP and Taiwan Railways' Nanke Station with 94 service frequencies per day while at the KSP, free shuttle bus services are provided between Taiwan Railways' Luzhu Station, the dormitory area, and Park enterprises with 16 service frequencies. By the end of 2013, the number of rides reached 900,000, equivalent to the reduction of 2,532 tons of carbon emissions.



