

Sustainability@CityU

“Showcasing the Smart-Bin as a model for good sustainability practice at CityU for food waste management”

The Smart Bin project under the Campus Sustainability Fund (CSF), led by Dr. Alicia An of the School of Energy and Environment (SEE), seeks to increase campus sustainability by installing and operating an automated food waste collecting bin, called the Smart Food Waste Recycling Bin (S-FRB), that can process food waste into fertilizer or energy resource such as biofuel. Our team successfully installed the S-FRB system next to the Garden Café last May, and since then, using the S-FRB, we have been converting the food waste from café into bioproducts while accumulating data on food waste disposal patterns on our campus.

As an extension of our project, our team has been searching for ways to collaborate with other groups or communities so that the S-FRB’s bioproducts can be put to use. Our collaboration with the GROW (Green Roofs Over Walls) project team at CityU marks our first venture into expanding our efforts for turning food waste into green resources. The GROW project aims to enlarge the number of Hong Kong people committed to organic vegetable production, and consumption. Through permaculture practices, the GROW initiative aims to produce 800 kilograms of vegetables per year, 75% of which are donated to Pei Ho Counterparts, a charity launched by Chan Cheuk-ming (also known as “Ming Gor”).

On 22 July, we participated in the organic gardening activity organized by the GROW team at the AC2 rooftop garden, where we offered 40 kg of our Smart Bin fertilizer (see fig left). With the specially-invited organic farming expert, our teams and student volunteers completed fertilization, a fundamental stage of farming, of the rooftop garden. We look forward to furthering student experiences in campus sustainability efforts with the GROW team and will continue our efforts to bring new insights and resources for creating a sustainable campus and a smart city.



Fertilizer processed by smart bin



Smart Bin team members: Mr. Yeo (fourth from the right, back row) and MR. Lee (third from the right, back row)