

RESPONSIBLE CONSUMPTION AND PRODUCTION

Research



Eco-Friendly Moisture Absorbing Fabric

Professor Hu Hong, Professor of the School of Fashion and Textiles won a prestigious global innovation award at the TechConnect World Innovation Conference and Expo 2022 for his eco-friendly moisture absorbing fabric. The new fabric stands out from the existing moisture-absorbing fabric technology in that its fabrication is simpler, cheaper and more environment-friendly. By employing double-weft knitting technology, it only takes one single manufacturing process to produce the new fabric structure with its improved moisture-absorbing and sweat-releasing properties. The fabric also has inherent biological resistance, making it ideal for use in school uniforms and sportswear.

Suga Research Laboratory for Sustainable Urban Green Agriculture

The Suga Research Laboratory for Sustainable Urban Green Agriculture is Hong Kong's first urban agriculture research platform. Employing innovative technologies, the Laboratory aims to develop the next generation of urban agriculture models for cultivating high-quality, safe fruits and vegetables in small indoor spaces. Research is being conducted to explore the optimal environmental conditions for crop growth, as well as systematic assessment and comparison of the food safety risk posed by harmful chemicals and food-borne bacteria found in vegetables grown from hydroponics and traditional farming.

Education

Subject: Sustainable Product Design

Hosted by the School of Design in collaboration with the Departments of Industrial and Systems Engineering and Mechanical Engineering, and with Swire Coca-Cola HK as an external partner, this subject aims to enable students to explore and practise product design with an understanding of broader social and ecological implications, thus equipping them to be sustainable design consultants.

In the 2021/22 academic year, students participated in a recycling plus upcycling design project, "Upcycling Design for Social Inclusion". The retired bottle trays of Coke were given a second life by turning into new products like clothing tags for the visually impaired.

Subject: You Can Make a Difference to Our Planet

Hosted by the Department of Applied Social Sciences and serving low-income families and individuals, this subject involves students in planning and implementing projects suggested by community partner organisations that address issues of social, economic and environmental sustainability. For instance, our students did home visits to provide lessons to secondary schoolkids in Kwun Tong, engaged in community education by setting up sustainable farming and "fish and vegetable symbiosis" experiments in their school, which allowed them to create impact in the community.





Engagement

Sustainable Material Corner Exhibition

Hosted by the School of Design and attracting 500 attendees, the Sustainable Material Corner Exhibition: Circularity was held in 2022.

Eco-friendly materials are now product staples, designed and manufactured by very many companies, some of whom have engineered their own material recovery systems. Recognising the importance of this trend, the Material Resource Centre of the School of Design has collected sustainable materials from around the world and classified them in order to identify an optimal resource cycle. The exhibition served to provide visitors with information about the latest trends in sustainable materials.

Policies and Operations

Waste Disposal and Responsible Consumption on Campus

From policy setting to day-to-day operations, from architectural design to implementation, from research projects to academic programmes, PolyU embeds sustainability principles across all areas of its work and actively promotes a green culture.

In order to properly handle and responsibly dispose of waste generated on campus and to minimise the disposal of waste to landfills, the University has various policies focusing on waste management and green practices. These include those relating to green procurement, paper and straw use reduction, phasing out bottled water and minimising the use of disposables at University events. PolyU has been widely recognised in Excellent Level for WastewiSe.





PolyU GreenCoin—A Fascinating Way to Green Your Campus Experience

As a platform to engage the University community in adopting a more sustainable lifestyle, the University has been operating the GreenCoin initiative on campus since 2019.

GreenCoin enables users to earn virtual coins for engaging in sustainability activities including recycling or Bring Your Own (BYO) practices. The coins can be redeemed for e-coupons for use on campus, such as for sports facility bookings, catering outlet dining and environmentally friendly souvenirs. Exclusive GreenCoin offers have also promoted redemption of selected plant-based items including candies, coffee and soap.

Recycling volume at reverse vending machine (RVM)

(🖹) 100,184

(increased more than 85%) (compared to 2020/21)



Reduction of municipal solid waste disposal to landfill (tonnes)

BYO practices **34,000**





