

香港綠色創新大獎

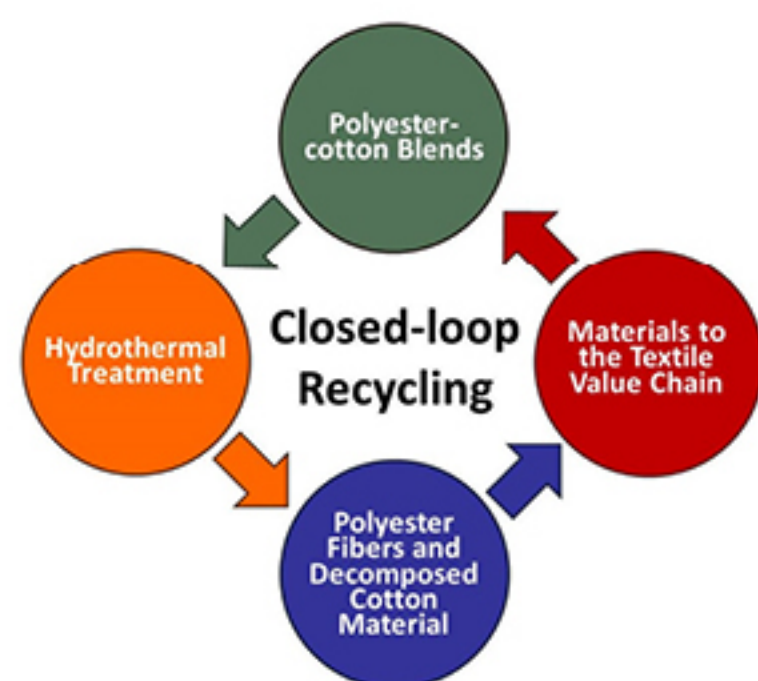
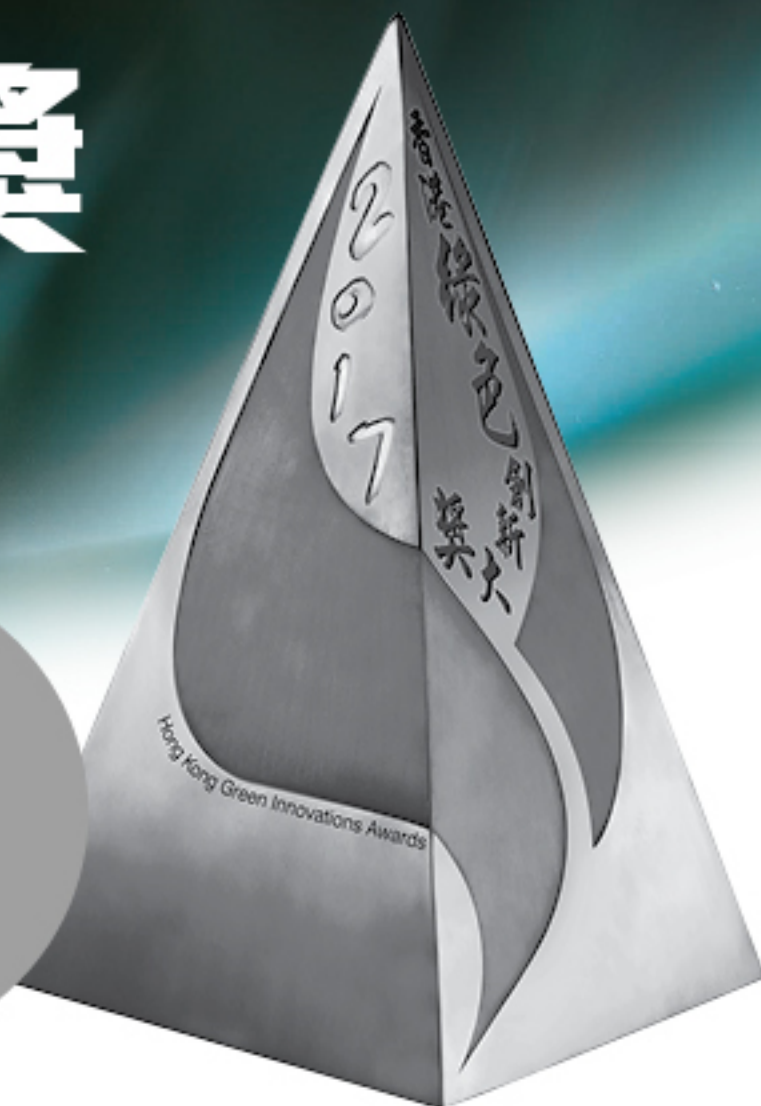
Hong Kong Green Innovations Awards



香港紡織及成衣研發中心 —
將舊衣重用的水熱處理環保技術
The Hong Kong Research Institute of Textiles and Apparel -
Post - consumer Textile Recycling by an Eco-friendly
Hydrothermal Treatment

本項目透過環保的水熱處理技術，把回收衣料中的聚酯纖維從聚酯和棉混紡中分離，以便日後循環再造。整個過程使用水和「綠色」可降解催化劑，對環境的影響十分輕微。相比生產全新纖維，這項生產技術可減少超過百分之七十的能源消耗，同時有助紡織廢物循環再用。

The application is an eco-friendly hydrothermal treatment technology to recover polyester from post-consumer polyester-cotton blended textile to facilitate future recycling. The whole process involves water and “green” biodegradable catalyst and thus the impact to the environment is minimal. Compared to the production of virgin polyester, the production process of recycled polyester with this treatment has saved over 70% of energy and at the same time facilitated the recycling of textile waste.



使用水及環保物質從滌棉混紡衣物中分離和回收聚酯，降低回收過程對環境造成的影響。

Separating and recycling polyester from polyester-cotton blends with use of water and environmentally-friendly substances which has resulted in lower environmental impact during the recycling process.



分解棉纖維的過程在三十分鐘到兩小時內便能完成，大幅減少所需的能源。

Completing the decomposing process of the cotton fibres in around thirty minutes to two hours to achieve a significant reduction of energy required.



聚酯纖維的回收比率超過98%，而回收纖維的材料性能亦與原材料相若，從而減少對生產全新聚酯纖維的需求。

Recovering polyester fibres at a rate of over 98% with material property comparable to virgin material so as to reduce the need for manufacturing new polyester fibres.