



Appendix

The Establishment Ceremony of the Cross-strait Green University Consortium Highlights of Environmental Initiatives at CUHK

1. Energy saving and carbon reduction

- Setting energy saving and carbon reduction targets to reduce greenhouse gas emission by 20% and energy use per capita by 25% by 2025.
- Wide application of renewable energy to supply hot water and illumination:
 - Being the first university in Hong Kong to install a solar power system, CUHK has installed solar panels for water heating, lighting and water pumping since 2004. Some of these are installed with hybrid integration of wind power;
 - Energy collected by over 2,000 solar panels installed equals to 4.3% of the campus's peak consumption; plans are developed to augment the use of renewable energy by installing more solar panels;
 - Renewable energy supply common for student hostels, sport halls, bus station canopies and outdoor lighting.
- Electricity consumption was reduced by about 58 million kWh over the last ten years by retrofitting lighting, air-conditioning and electrical equipment, saving energy cost by about HK\$46 million.
- Hydraulic energy has been used since 2006 to facilitate irrigation and water circulation.
- Two water towers on the hilltops save pumping power for more than 140 buildings.
- Requiring all new buildings on campus to meet the HK-BEAM platinum standard, and using LED lighting in place of halogen lamps.
- Increasing energy efficiency by using a district cooling system for new development projects.
- Construction wastes are recycled to produce eco-glass blocks for campus construction projects.
- All central air-conditioning systems are set at 25.5°C.

2. Water saving

- An artificial lake was built and equipped with pumping facilities to irrigate the whole campus, supplying up to 1.1 million litres of water per day to the University, a measure that is both environmentally friendly and cost-effective.
- Studying the recycling and treatment system to improve the quality and uses of water in Lake *Ad Excellentium* to achieve the target of reducing water consumption by one third.
- Recycling water from the swimming pool and shower rooms for irrigating the

Herbal Garden.

3. Ecological conservation

- CUHK campus is home to 133 species of birds, 11 species of dragonflies, and 48 types of butterflies.
- Large trees and valuable species are recorded on the campus habitat map.
- Planting trees all over the campus, operating a tree conservation policy and developing green roofs.
- Five Chinese medicinal herb gardens were established on campus to collect, cultivate and display more than 500 species of medicinal herbs, the largest variety in Southeast Asia.
- Preserving ecological variety by, for example, conserving the house swift colony on campus, which is the largest of its kind in Hong Kong.
- Food and vegetable wastes are used to produce fertilizers for landscaping and organic farming.

4. Paper reduction

- Promoting a paperless work environment, where documents are delivered through computer networks and stored on electronic files with reduced printing and photocopying.
- Encouraging the classification of used papers and increasing collection points of used papers.

5. Green education

- Organizing urban tree management seminars to enhance public awareness of the importance of tree conservation.
- Organizing talks and eco-tours to introduce the green undertakings and facilities on campus and to share with schools and the community at large our energy saving and carbon reduction experiences.
- Launching an Environmental Sustainability Ambassador Programme and training 102 ambassadors to promote energy saving and environmental protection on campus.
- Building a pedestrian friendly campus by improving the road system and organizing walking campaigns to cultivate a culture of walking.
