



對生態負責任的採購理念 Ecologically Responsible Buying

相 比起傳統產品，綠色產品對環境帶來的不良影響較輕微，並可以推動回收業和減少廢物量。中文大學十分關注生態保育，向來鼓勵在採購方面作出對環境保護應有的承擔。

為了將這些行之已久的做法規範化，並切實執行，大學在2011年10月訂立了《環保採購政策》。中大承諾在公開、公平及符合物有所值的原則下，會購買對環境及健康的危害低於傳統產品的環保產品。

此政策旨在緊貼最新和最為人推許的環保標準；長遠目標是將環保採購原則融入大學所有活動之中，確保所購買的產品和服務不會破壞環境，能善用天然資源，維護校園生態，並保障校內同仁健康。

大學正在擬定有關環保採購的指引，並會在財務處商務組網頁公布符合環保規格的常用產品清單，要求大學各單位遵守。如需購置的項目不見於指定名單，大學同仁亦可參閱政府環保署有關環保採購的網頁 (www.epd.gov.hk/epd/tc_chi/how_help/green_procure/green_procure.html)。



Green products often have a smaller undesirable impact on the environment compared to conventional products. They can also facilitate the operations of the recycling industry and reduce the amount of waste produced. Being an ecologically astute institution, the Chinese University has always promoted environmentally responsible principles when making purchases.

To formalize and deepen these practices, it adopted a green purchasing policy in October 2011. The policy states that CUHK is committed to buying green products that have a reduced negative effect on the environment and/or human health, compared to similar conventional products, while maintaining the principles of value for money as well as open and fair competition.

The policy aims at meeting the latest and most credible

environmental standards available, with the long-term aim at integrating green purchasing into all University activities; and ensuring that the products and services purchased can safeguard the environment, natural resources, campus ecology, and occupational health of the CUHK community.

To facilitate the practice, a set of guidelines are being drawn up and a list of general items with green specifications will be posted on the webpage of the Business Office for mandatory compliance by University units. For procurement of items not on the mandatory list, University members are advised to refer to the webpage of the Environment Protection Department of the Government (www.epd.gov.hk/epd/english/how_help/green_procure/green_procure.html). *



環保採購常用詞彙

低生命周期累計成本——指產品或服務在整個生命周期內，或某段特定的時間內，總共涉及的經常和非經常開支，包括購置、安裝、營運、保養和升級費用，乃至擁有權或可用期完結時它剩餘多少價值

節水、節能——較同類產品更省水省電

使用再生能源——以如陽光、風力等可再生能源發電驅動

本地生產——於香港或就近地區生產或組裝

簡約包裝——較同類產品用更少物料包裝

耐用及可升級——可供長期使用，而性能不會明顯下降；可藉升級提高性能或功能，而毋需棄舊換新

翻新或循環再造的產品——製品屬翻新再用，翻新時盡量利用原有物料；或屬廢料回收再造，以減少生產過程中消耗原材料

排放較少溫室氣體 (GHG) ——產品或物料在生命周期內，所排放至大氣層的溫室氣體較少，尤其是二氧化碳、甲烷、氯氟碳化合物，以及氧化亞氮

可生物降解——會自然分解，在數月或數年後變為無害物質

毒性小——對人體和生態系統的危害較小

無致癌成分——不含任何會致癌的物質、放射性核素或輻射

不含氯氟碳化合物 (CFC) ——不用以氯、氟、碳、甚或氫製成的化合物，它們多用於冷凍劑、清潔劑、噴霧推進劑，或製造發泡膠的泡膠劑。氯氟碳化合物會破壞平流層臭氧，並且是會令地球暖化的強力溫室氣體。

不含持久性、生物積聚性和有毒的化學物質 (PBT) ——此類物質會毒害環境，在生物體內積聚，遺害甚久，位處食物鏈愈高層的動物，體內所含的濃度會愈高。此類物質一旦污染環境，將無遠弗屆，無論植物、動物、人類，乃至整個生態都受危害，影響多個世代。該等物質會威脅人體健康，包括引起生殖系統病變。汞、二噁英，以及多氯聯苯，都屬於此類。

揮發性有機物 (VOC) 含量較低——指所釋出的會污染空氣的化學物質較少。揮發性有機物大都有毒，並會致癌。

Glossary of Terms Commonly Seen in Green Procurement

Low life-cycle cost—sum of all recurring and non-recurring costs over the full life span or a specified period of a good or service. It includes purchase price, installation cost, operating costs, maintenance and upgrade costs, and remaining value at the end of ownership or its useful life

Energy and water efficient—using less energy and water than similar products

Running on renewable energy—operating using renewable energy as power source

Locally manufactured—manufactured or fabricated in Hong Kong or nearby region

Reduced packaging—using less packaging materials than similar products

Durable and upgradable—being useful/usable for a long time without noticeable drop in performance; the ability to improve performance/features without requirement for replacement

Refurbished/Recycled products—products restored to their original working order while maximizing the reuse of their original materials, or those recovered from the waste stream and utilized in place of raw or virgin material during the manufacturing process

Reduced greenhouse gas (GHG) emissions—emission of fewer greenhouse gases (in particular carbon dioxide, methane, CFCs and nitrogen oxides) to the atmosphere during product/material's life-cycle

Biodegradable—able to decompose naturally into harmless raw materials in months or years

Low toxicity—being less harmful when coming in contact with humans and the ecosystem

Carcinogen free—without substances, radionuclides, or radiation that is an agent directly involved in causing cancer

Chlorofluorocarbon (CFCs) free—without any of a group of compounds containing carbon, chlorine, fluorine and sometimes hydrogen that have been used as refrigerants, cleaning solvents, aerosol propellants and in the manufacture of plastic foams. CFCs destroy the earth's stratospheric ozone layer and many CFCs are also potent greenhouse gases.

Persistent, bioaccumulative and toxic (PBT) chemical free—without toxic chemicals that persist in the environment and increase in concentration through food chains as larger animals consume PBT-laden smaller animals. Once released into the environment, they can travel long distances and impact generations of plants, animals or humans, posing a long-term risk to the ecosystem. They are associated with a range of adverse human health effects including effects on the reproductive system. Examples of PBTs are mercury, dioxins and PCBs (polychlorinated biphenyls).

Low volatile organic compound (VOC) content—with a reduced amount of chemicals that readily evaporate and contribute to the formation of air pollutants when released into the air. Many VOCs are classified as toxic and carcinogenic.



書院見新綠

Two New Colleges Open

矗立於校園內的晨興和善衡書院業已落成。兩所書院成立於2006年，去年錄取首批學生，最近先後舉行開幕典禮。本期《可持續校園》訪問了兩所書院的用家，暢談他們在新校舍的生活。

Two new Colleges now sit harmoniously side by side on the CUHK campus—Morningside College and S.H. Ho College. Both were established in 2006, admitted their first cohort of students in 2010, and held their official opening ceremonies recently. In this issue, *Sustainable Campus* talks to some of the users of the two Colleges about their experiences so far.



善衡書院 S.H. Ho College

善衡書院舍監及文學院副院長許焯權教授說：「我的宿舍既可俯瞰吐露港的優美景致，又位處校園心臟地帶，往來便利。書院經常舉辦各類型的學生活動，當中最重要者，首推為促進學生與書院成員互動而設的共膳制度，再加上其他由書院和學生主辦的活動，師生間和學生間互相認識往還的機會多得很。這裏的生活猶如大家庭，院長辛世文教授是家長，教師像兄姐，而學生則是孩子。大家都有家的歸屬感。身為建築師的我，很欣賞書院的設計，例如它把新舊建築物糅合為一體；提供和善用開放空間（我們有很大的天台花園）；宿舍的坐向考慮了日照和景觀，並且與膳堂和研討室等設施結合在一起。」

來自海南島的學生譚玉琪（右）說：「我們既有很大的自由度，又感受到小社區緊密的鄰里生活，且不時有驚喜。院內的家具是陸續增添的，有一天，洗手間突然出現了鏡子。多興奮啊！有人還敲敲鏡子，看看是否能像電影《哈利波特》般走進鏡子內。書院將於明年1月舉辦台灣環保遊。我們學生又組成了綠色生活宣傳小組，每月舉辦宿舍關燈一小時，一起喝糖水，當然是自備食具啦。」

本地生顏超敏（左）說：「師友計劃的導師常與學生共晉早餐，有的會帶學生一起看電影，有的則去遠足。我是綠色生活宣傳小組組員，正策劃爬樓梯比賽，以鼓勵大家多步行，少用升降機。我們又栽種植物出售，所得款項會捐予環保組織。」

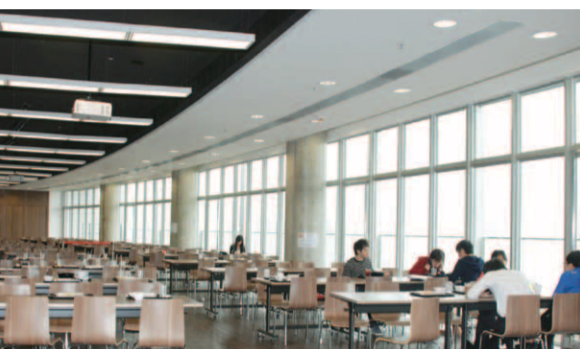
Warden of S.H. Ho College, Prof. Desmond Hui, associate dean of the Faculty of Arts: 'My quarters at the College have nice views of Tolo Harbour and a convenient location. The College has regular planned activities for the students, the most important being communal dining where we could interact with students and colleagues. Other activities are also organized by the College and the students, so there is no shortage of opportunity for interaction. The atmosphere is that of a family, with Master, Professor Samuel Sun Sai-ming as the father figure, teachers the siblings, and students the kids. Everyone has a filial sense of belonging. As an architect, I also like how the College's design incorporates both old and new buildings, optimizes the use and provision of open spaces (we have a big roof garden), the distribution of residential tower blocks in terms of orientation to the sun and the views, and their integration with the amenities of dining hall, seminar rooms, etc.'

Student of the College, Tan Yuqi (right), originally from Hainan: 'There's a great sense of freedom, community and surprise. Even the furniture came in piece by piece. One day, there were mirrors in the toilets. We were so excited! Someone knocked on one to see if you could pass through it like in a Harry Potter movie. The

College is organizing an eco-tour to Taiwan next January. We have a student organization, Green Life Promotion Team, which does a monthly Green Night when we all turn off the lights for an hour and have Chinese dessert soup together, with self-brought eating utensils, of course.'

Local student Ngan Chiu-man (left): 'The mentors of mentor groups would meet students for breakfast; some would take them to movies or organize hikes. I'm a member of the Green Life Promotion Team. We plan to have a stair-climbing race to encourage walking over taking the lifts. We'll grow plants for sale and donate the money to environmental organizations.'





晨興書院 Morningside College

系統工程與工程管理學系博士生郭永鴻是晨興書院宿舍導師，他說：「書院選址極佳，到大學本部或港鐵站同樣方便。書院景觀非常好，設計與周圍的自然環境配合。書院匯聚了國際生、內地生和交換生，是不同文化的熔爐，有利於學習彼此的經驗。我愛晨興書院。新書院的好處是師生能夠攜手共建傳統。」

來自委內瑞拉的學生Manuel Reimi (右圖) 說：「書院的地點優越，日後校園南端發展起來後，會更加方便。膳堂、教學樓、運動設施及港鐵站都近在咫尺。我欣賞院內的開放空間。我們的院長莫理斯教授非常愛護地球，首次聽他的講座，講題便是關於全球暖化。為了提高環保意識，他要求我們少用空調。莫理斯教授贊成開徵碳排放稅，他要我們每次耗用能源前，都假設要付碳排放稅，那樣自然不敢浪費。有這麼一位令人敬仰的書院成員，自書院莫立之始已強調環保的重要，足證書院矢志推動綠色生活的決心。」

Resident tutor of Morningside College, Mr. Kuo Yonghong, doctoral student in the Department of Systems Engineering and Engineering Management: 'The location of the College is great—equally close to the main campus and the University station of the MTR. The views are excellent and the design is harmonious with the natural surroundings! The College has a good mix of international, mainland and exchange students, which enables mingling of cultures and sharing of experiences. I love Morningside. Being new, its staff and students have the chance to start a new tradition for the College.'

Manuel Reimi (right), student from Venezuela: 'The College has a great location which will get even better



with the developments on South Campus. Canteens, teaching facilities, sport facilities and even the MTR are all a relatively short walk away. I love Morningside's openness. Our Master Sir James Mirrlees is very concerned with the health of our planet. The first time I was lectured by him the topic was about global warming. He tried to raise our awareness by asking us to reduce our use of air-conditioning. He argued for a carbon tax and pleaded with us to behave as if such a tax was already in place every time we wanted to consume energy. That way we could avoid being wasteful. I believe that this emphasis on the environment early on by the most admired member of our College shows the commitment Morningside has to green practices.' ✨

綠色印記 Shades of Green

日期 Date	活動 Event	主辦單位 By
12.10.2011	中大工程學院於二十周年「創新科技展」展出利用分子印跡技術 (MIP) 來建立一個微型傳感器，檢測空氣污染物 (多環芳烴PAH) CUHK Faculty of Engineering 20th Anniversary Innovation and Technology Fair showcasing a molecularly imprinted polymer (MIP) technique that detects airborne polycyclic aromatic hydrocarbons (PAHs) through use of a miniaturized sensor	工程學院 Faculty of Engineering
24.9.2011, 31.10.2011, 5.11.2011	崇基學院及新亞書院樹鳥行 Tree & Bird Walk in Chung Chi and New Asia	中大樹木計劃 CU Tree Project
11.2011	節省能源比賽——用水及用電 Energy Saving Competitions—Water and Electricity	逸夫書院 Shaw College
5.11.2011	活水體驗「逸」 Living Water Walk www.facebook.com/event.php?eid=302109626471961	綠色天地 Green World
11.11.2011	綠色生活講座 Green x Life Talks www.ws.cuhk.edu.hk/index.php?option=com_content&view=article&id=95%3Agreen-x-life-&catid=2%3Anews-archive&Itemid=80&lang=zh-tw	和聲書院 Lee Woo Sing College
5-13.11.2011	中大創新科技之旅——供中小學生及家長參加的導賞團，旨在加深他們對綠色科技應用的認識 iTour@cuhk of InnoCarnival—taking primary and secondary students, and their parents around campus to view use of green technologies. apps.cintec.cuhk.edu.hk/itour/chi/index.html	工程學院創新科技中心 Centre for Innovation and Technology, Faculty of Engineering
7.12.2011	校園發展分享會 Campus Development Sharing Session	協理副校長馮通教授辦公室 Office of Prof. Fung Tung, Associate Pro-Vice-Chancellor

崇基鐘聲響起時 Chung Chi's Carillon Chimes



可曾試過在校園蹣跚，尤其是在崇基校園附近，聽到久違了的天星碼頭鐘聲，即耳熟能詳的「西敏寺鐘調」？

鐘聲是崇基學院新添置的鐘琴發出的。這座在11月初啟用的鐘琴，設有三組共二十四個鐘鈴，由德國帕紹一家鑄鐘廠的魯道夫·佩納設計，是一件別出心裁的藝術品。

崇基學院神學院院長盧龍光牧師（圖）說：「鐘鈴由中國人發明，歷史上用作樂器、慶祝、幫助凝神貫注，後來用作報時。鐘聲亦提醒我們生命正一點一滴流逝，必須恆自內省。在歷史悠久的大學，總會有鐘響定時響起，美國加州大學柏克萊分校和英國伯明翰大學就建有鐘樓，好些內地大學的校徽也有鐘的圖案。崇基鐘琴是全港首個設有二十四個鐘鈴的鐘琴。」

除了由早上8時至晚上10時每小時報時外，崇基鐘琴於每早8時25分的早禱時間、晚上9時55分晚禱時間，以及每周四的傍晚5時55分，即神學院6時的崇拜前，均會奏出詩歌。

You may have heard the familiar chimes of the Star Ferry turret clock, aka the Westminster Chimes, while walking on campus, especially if you're within hearing shot of Chung Chi College.



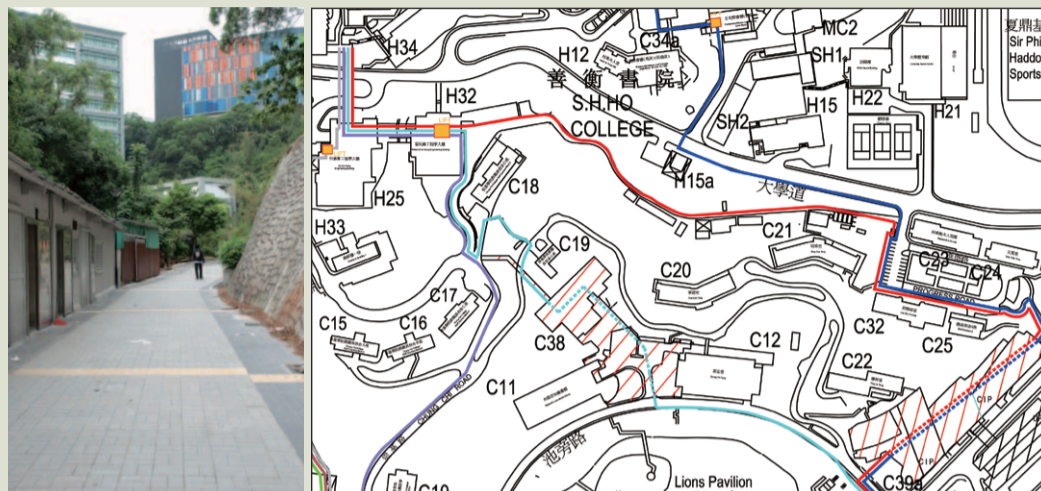
The source of that music is the new carillon at the Chung Chi Chapel. In operation since early November, the instrument consisting of 24 bells in three sets is a beautiful work of art designed by Rudolf Perner of a German bell foundry in Passau. Rev. Prof. Lo Lungkwong (left), director of the Divinity School of Chung Chi College, says, 'The bell, an instrument invented by the Chinese, has historically served the purposes of making music, celebration, focusing attention, and later telling the time. It's also a reminder of life's passing and the need for self-reflection. The chiming of bells is a regular sound at any old university. UC Berkeley and the University of Birmingham have bell towers. In mainland China, there are universities that have bells in their logos. The Chung Chi carillon is the first 24-bell carillon in Hong Kong.'

Besides chiming every hour from 8 am to 10 pm, the Chung Chi carillon plays hymns at morning prayer (8:25 am), vespers (9:55 pm), and at 5:55 pm every Thursday, before the 6 pm service at the School of Divinity.

崇基至工程大樓僅需十三分鐘 CC to Engineering Building Only 13 Minutes with New Footpath

本校師生人數在2012年將大增，為疏導人潮及減輕對車輛的依賴，大學將現有崇基學院和蒙民偉工程學大樓之間一段路徑闢為更便於行走的步行徑，方便行人往來。整條長約八百三十米的步行徑，走完僅需十三分鐘，雖然是上坡路，但坡度平緩，走起來與平路無異。

步行徑由港鐵大學站的新出口（位於方樹泉樓對面停車場附近，將於2012年年中啟用）開始，行人於正興建的兩座綜合教學大樓內，可乘扶手電梯至崇基校園，然後向西行約四百米，沿途景致怡人，經過物業管理處苗圃，即可抵達何善衡及蒙民偉工程學大樓，以及大學本部。



To help ease pedestrian and vehicular traffic following the rise in campus population in 2012, the University has enhanced an existing route into a pedestrian-friendly footpath between Chung Chi College and William M.W. Mong Engineering Building. The entire 830 m uphill walk will only take 13 minutes and you will barely be able to feel the incline. The route begins at the new MTR exit (near an existing car park across the road from the Fong Shu Chuen Building, which will come into operation some time in mid-2012). Walkers can then take the escalators inside the Two Integrated Teaching Buildings, now under construction, to the Chung Chi campus. The route then goes in a westerly direction for a scenic 400 m, past the nursery of the Estates Management Office, to Ho Sin Hang and William M.W. Mong Engineering Buildings and central campus.



大學廣場重開迎畢業禮 University Square at Congregation

為舉行第六十九屆大會，大學圖書館前的大學廣場在12月初重開。校園發展處副處長馮少文說，為保留該處的原貌和坡度，花了很大心思，例如以花崗石取代洗水石米鋪砌地台，這樣比較美觀、耐用和易於保養。新植的灌木叢現在尚很幼小，待日後生長茂盛後，會修剪恢復原來圖案。

To provide a full venue for the 69th Congregation, the University Square in front of the University Library was reopened for in early December. Mr. Fung Siu-man, deputy director of the Campus Development Office, said much effort has been put into retaining the original look and gradient of the area. That said, granite has been used in place of washed granolithic finish for better appearance, durability and ease of maintenance. The bushes may be looking a bit sparse now but they will grow and be trimmed to the original pattern when ready.

第三屆持續發展環保大使工作坊 Third Environmental Sustainability Ambassador Workshop

持續發展環保大使計劃於2011年11月2及5日舉辦工作坊，邀請中大及非政府組織的學者和專家主持專題講座，講題包括碳審計、動植物保育、健康環保煮食、綠色工藝，以及形形色色的循環再用方法等。是次工作坊並頒授證書予八十七名環保大使。

The Third Workshop of the Environmental Sustainability Ambassador Programme took place on 2 and 5 November 2011. Experts from the University and NGOs spoke on topics including carbon auditing, protecting flora and fauna, green cooking and green handicrafts, and all forms of recycling. A total of 87 certificates were given out to ambassadors.

