

THE CHINESE UNIVERSITY OF HONG KONG

Campus Planning and Sustainability Office

Green Purchasing Policy

1. Mission

The Chinese University of Hong Kong (CUHK) seeks to continuously improve the environmental quality of our campus by purchasing and using environmentally friendly materials and products whenever they meet our cost and performance requirements.

2. The Policy

CUHK is committed to purchasing green products that have a reduced negative effect on the environment and/or human health when compared to similar conventional products while maintaining the principles of value for money as well as open and fair competition.

Similarly, CUHK also requires hired consultants and contractors to specify/adopt the same green purchasing requirements in their design and installation works.

3. General Principles

Green purchasing is also often referred to as green procurement, responsible purchasing and environmentally preferable purchasing. The following are some general principles to be adopted when purchases are done or when tender and contract specifications are prepared:

- (i) When purchases are deemed necessary for our offices, laboratories, workshops, classrooms, lecture theatres, hostels and quarters, additional consideration shall be given to specifying/selecting environment-friendly products and materials that have as many of the following attributes as is applicable and practicable:

- | | |
|---------------------------------|---|
| ✓ Low life cycle costs | ✓ Reduced greenhouse gas (GHG) emissions |
| ✓ Energy and water efficient | ✓ Biodegradable |
| ✓ Using renewable energy | ✓ Low toxicity |
| ✓ Locally manufactured | ✓ Carcinogen free |
| ✓ Reduced packaging | ✓ Chlorofluorocarbon (CFC) free |
| ✓ Durable and upgradable | ✓ Persistent, bioaccumulative and toxic (PBT) chemical free |
| ✓ Refurbished/Recycled products | ✓ Low volatile organic compound (VOC) content |

(Please refer to the Appendix for the definitions of these attributes)

- (ii) For products with available publicly recognized environmental labels or energy labels, such labels should be included as compulsory purchasing/tendering requirement.

- (iii) To facilitate green purchasing, a list of general items with widely-used green specifications, selected and endorsed by the Committee on Campus Sustainability, shall be posted on the webpage of the Business Unit, Finance Office for **mandatory** compliance. These green specifications (or other equal/superior environmental standards) shall be included as purchasing requirements whenever the University's purchasers (as well as contractors and consultants purchasing on behalf of the University) purchase the listed items. Besides, it is highly recommended that they should also refer to the webpage of the Environment Protection Department of the Government for green procurement of items not on our mandatory list.
http://www.epd.gov.hk/epd/english/how_help/green_procure/green_procure.html
- (iv) The list of general items with green specifications for mandatory compliance shall be subject to regular review by the Committee on Campus Sustainability to be commensurate with changing market circumstances, the level of awareness and acceptance at the University, and the introduction of newer, superior standards.
- (v) The goals of our green purchasing are:
 - (a) To meet the latest and most credible environmental standards available;
 - (b) To integrate green purchasing into design, construction, operation and maintenance, requirements, manuals and specifications in all University activities; and
 - (c) To ensure products and services so purchased can safeguard the environment, natural resources, faunal and floral ecology on campus, and occupational health of our community.

Approved by AAPC on 4 October 2011
Revised in February 2020

Appendix: Definitions of attributes

1. **Low life cycle costs:** the true cost of a product or service, including capital costs, installation costs, operating costs, maintenance costs and disposal costs, that discounted over the lifetime of the product or service is lower than that of similar products or services.
2. **Energy and water efficient:** that uses less energy and water than similar products.
3. **Running on renewable energy:** able to operate using renewable energy as power source.
4. **Locally manufactured:** manufactured or fabricated within Hong Kong.
5. **Reduced packaging:** with less packaging materials than those of similar products.
6. **Durable and upgradable:** that remains useful and usable for a long time without noticeable deterioration in performance, and is able to increase performance or features without needing replacement.
7. **Refurbished/Recycled products:** that has been restored to its original working order while maximizing the reuse of its original materials, or recovered from the waste stream and utilized in place of raw or virgin material in manufacturing a product.
8. **Reduced greenhouse gas (GHG) emissions:** that emits fewer greenhouse gases (in particular carbon dioxide, methane, chlorofluorocarbon and nitrogen oxides) to the atmosphere during the product or material's life cycle.
9. **Biodegradable:** that is able to decompose naturally into harmless raw materials in months or years.
10. **Low toxicity:** being less harmful when in contact with humans and the ecosystem
11. **Carcinogen free:** without substances, radionuclides, or radiation that is an agent directly involved in causing cancer.
12. **Chlorofluorocarbon (CFCs) free:** without any of a group of compounds that contain 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.
13. **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 polychlorinated biphenyls (PCBs).

14. **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 indoors or outdoors, compared to similar products. Many VOCs are classified as toxic and carcinogenic.

香港中文大學

校園規劃及可持續發展處

環保採購政策

1. 使命

香港中文大學為持續改善校園環境質素，致力搜購並使用價格與性能皆合乎本校要求的環保物料和產品。

2. 政策

香港中文大學秉持公開、公平及物有所值的原則，採購對環境及人體健康危害較傳統產品為少的環保產品。

大學亦要求受聘的工程顧問及承建商在設計和施工時，制訂類同或遵照此等環保採購政策。

3. 基本原則

環保採購又稱為綠色採購、負責任採購和環保優先採購。大學同人在採購或擬訂招標文件和合約時，應參考下列基本原則：

- (i) 若辦公室、實驗室、工作坊、課室、演講廳、學生宿舍和職員宿舍等要添置物品時，須顧及環保效益和實際情況，並盡量以下列特性為依歸：

- | | |
|--------------|----------------------------|
| ✓ 低生命週期成本 | ✓ 排放較少溫室氣體（GHG） |
| ✓ 節水、節能 | ✓ 可生物降解 |
| ✓ 使用再生能源 | ✓ 毒性少 |
| ✓ 本地生產 | ✓ 無致癌成分 |
| ✓ 簡約包裝 | ✓ 不含氯氟碳化合物（CFC） |
| ✓ 耐用及可升級 | ✓ 不含持久性、生物積聚性和有毒（PBT）的化學物質 |
| ✓ 翻新或循環再造的產品 | ✓ 揮發性有機物（VOC）含量較低 |

（產品特性的定義請參照附錄）

- (ii) 若該類產品有公認的環保標籤或能源標籤，採購或招標時應規定選用有標籤的產品。

- (iii) 為推動環保採購，大學校園可持續發展委員會將挑選及指定一些常用產品及廣泛應用的環保規格，上載於財務處商務組的網頁，採購單位**必須**遵從。大學各單位（包括受聘的工程顧問和承建商而代本校採購者）在採購該名單上的產品時，必須確保產品符合所列的環保規格（或達到相同、甚至更高的環保標準）。採購指定名單以外的產品時，亦應參考政府環境保護署有關環保採購的網頁。
http://www.epd.gov.hk/epd/tc_chi/how_help/green_procure/green_procure.html
- (iv) 大學校園可持續發展委員會將定期檢討上述的常用產品及環保規格名單，以配合市場變化、大學同人對環保採購的認知和接受程度，以及更高更新的環保標準。
- (v) 香港中文大學環保採購的目標有三：
- 1) 符合最新、最可靠的環保標準；
 - 2) 將環保採購原則融入大學校園活動，令校園內的設計、建設、營運、維修，乃至相關的規定、手冊和規格等均體現環保原則；及
 - 3) 確保遵從此政策購買的產品和服務，能保護中大校園的環境、自然資源、動植物生態，以及大學同人的職業健康。

2011年10月4日獲大學行政與計劃委員會通過
於2020年2月修訂

附錄：產品特性定義

1. **低生命週期成本**：一件產品或服務的真實成本包括購置成本、安裝費用、營運成本、維修費和棄置費用，這些成本的總和經生命週期折算後，比同類產品或服務的生命週期成本為低。
2. **節水、節能**：比同類產品用少些水和能源。
3. **使用再生能源**：可以再生能源為動力來源。
4. **本地生產**：在香港境內生產或裝配。
5. **簡約包裝**：比同類產品使用較少包裝物料。
6. **耐用及可升級**：可長期使用而性能不會顯著衰退，亦可藉升級增強原有產品性能或添加功能，而無需購買新產品取代。
7. **翻新或循環再造的產品**：可經翻新後恢復產品的功用，因而延長原有物料的使用時間；或經回收製造出新的產品，而不需使用其他原材料。
8. **排放較少溫室氣體 (GHG)**：產品或物料於其生命週期內（由製造到棄置）排放至大氣層的溫室氣體（尤其是二氧化碳、甲烷和氯氟碳化合物和氮氧化物）較同類產品少。
9. **可生物降解**：可於數個月至數年內由生物自然降解為無害的物質。
10. **毒性少**：對人體和生態系統的危害較少。
11. **無致癌成分**：不含致癌的物質、放射性同位素或輻射。
12. **不含氯氟碳化合物 (CFC)**：氯氟碳化合物是由氯、氟及碳（有時或包括氫）組成的化學物，多用作冷凍劑、清潔劑、壓縮噴劑和製造發泡膠的發泡劑。氯氟碳化合物上升到平流層後，能破壞那裏的臭氧。很多種氯氟碳化合物都是強勁的溫室氣體。
13. **不含持久性、生物積聚性和有毒 (PBT) 的化學物質**：PBT 化學物質毒害環境且持久性高，能積聚於生物體內，以致食物鏈越高層的捕獵者，體內積聚越高濃度的 PBT 化學物質。環境一旦受 PBT 化學物質污染，可因生物移動而擴散，並影響一代又一代的植物、動物和人類，對生態系統造成持久的影響。PBT 化學物質與多種人類健康問題有關，包括生殖系統問題。PBT 化學物質的例子有：汞、二噁英及多氯聯苯 (PCBs)。
14. **揮發性有機物 (VOC) 含量較低**：與同類產品相比，含有較少容易氣化兼洩漏後會污染室內或室外空氣的化學物質。很多種揮發性有機物都具毒性及可致癌。