

PROMOTING SUSTAINABLE CONSUMPTION 推廣可持續消費

Product Comparative Test on Appliances with High Energy Consumption

Washing Machines

The Council conducted a test on 12 models of washing machines comprising 8 front-loading types (so-called “Big Eyes”) and 4 impeller types (so-called “Japanese types”). Both types performed similarly in overall cleaning efficacy. However, among models of the same type, energy and water consumption could vary as much as 70% and 50% respectively.

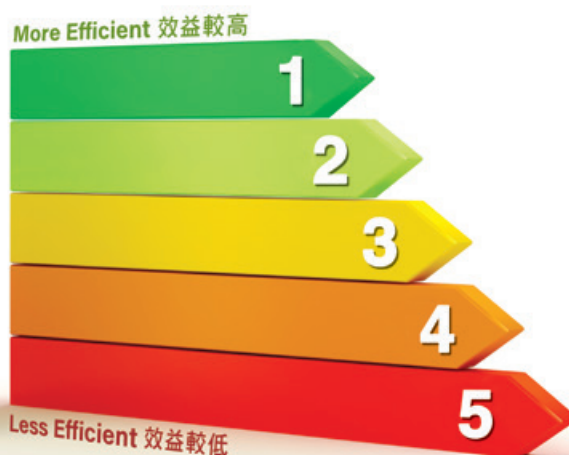
Washing machines with high energy efficiency consume less energy to wash clothes. The front-loading types, equipped with heating function, inevitably consumed more energy in washing per kilogramme load of garments – varying among the samples by up to 69% in cotton clothes, and by nearly 60% in synthetic fabric.

高耗電量產品比較測試

洗衣機

本會測試了12款洗衣機，包括8款前置式（俗稱「大眼雞」）及4款葉輪式（或「日本式」）。兩類樣本的平均潔淨效果相差不遠。但同一類別樣本間的用電量及用水量可分別相差最多約7成及5成。

若洗衣機能以較低的電量清洗衣物，代表能源效率越高。前置式樣本設有加熱功能，故清洗每公斤衣物的用電量會較高，清洗每公斤棉質衣物的用電量，可相差約69%；而清洗人造纖維衣物的用電量亦相差約6成。



Sustainable consumption is crucial for ensuring a greener environment for the next generation. The Council promotes and supports sustainable consumption through comparative product testing on appliances with high energy consumption, such as washing machines and air conditioners, and research on related issues, notably excessive product packaging and eco-labelling. It is committed through its research and testing to assessing the impact of the use of goods and services on sustainability, and to educating consumers for self-empowerment in making greener choices.

可持續消費對下一代擁有更綠化的環境，非常重要。消委會透過比較和測試耗電量較高的電器產品如洗衣機、冷氣機，以及研究有關產品過度包裝及環保標籤等議題，來支持和推動可持續消費。本會致力評估各種產品和服務對可持續發展的影響，通過教育，鼓勵消費者作環保的選擇。

On water consumption, the results showed that the front-loaders used less water on average. Their water consumption for washing a kilogramme of cotton clothes ranged from 6.9 litres to 14.9 litres, a difference of 53%. For the impeller types, water consumption for washing a kilogramme of synthetics ranged from 25 litres to 49.8 litres, a difference of 50%.

In choosing a washing machine, ideally it should be with energy and water saving but none of the samples could achieve both. Consumers were advised to review their washing needs and select the type that fits their washing needs.

Air-conditioners

The Council tested 14 models of split-type air conditioners with cooling capacity around 5.0 kilowatts to 5.3 kilowatts in layman's terms, 2-horsepower.

A relatively advanced Cooling Seasonal Performance Factor (CSPF) was adopted to assess the energy efficiency performance (cooling) of each model. CSPF is calculated based on the ratio of the total amount of heat pumped out from the room in a year to the total electricity consumption in the same period. A higher CSPF means better energy efficiency during cooling and more savings in electricity bill. The CSPF of the models tested ranged from 4.61 to 5.77. Based on the grading standard of the Mandatory Energy Efficiency Labelling Scheme (MEELS), the CSPF of the inverter-type air conditioners was 4.5 or above, indicating that all samples could meet the requirement of top Grade 1 rating in energy efficiency.

用水量方面，前置式樣本的用水量普遍較低。若以清洗1公斤棉質衣物計，前置式樣本間的用水量介乎6.9至14.9升，相差約53%。至於葉輪式樣本，清洗1公斤人造纖維衣物的用水量介乎25至49.8升，相差約50%。

在選擇洗衣機時，宜選用耗電量和耗水量低的型號，不過不同款式的洗衣機樣本各有不同的優點和缺點。建議消費者按個人洗衣需要，選擇合適的洗衣機。

冷氣機

本會首次測試14款變頻分體冷氣機，製冷量約5.0至5.3千瓦，即俗稱「兩匹」。

測試採用了較先進的「製冷季節性表現系數」(CSPF)評定各樣本的製冷能源效率，方法是計算冷氣機全年從室內排走的總熱量與其在同期間總耗電量的比率，數值越高代表製冷能源效率越高、越慳電。各測試樣本量得的CSPF數值介乎4.61至5.77。按現行的強制性能源效益標籤計劃之評級標準，分體機的CSPF數值須在4.5或以上，亦即所有樣本均達1級效益。

Air conditioners run up a great deal of electricity – and the bills. Assuming consumers leave their air conditioners on for 12 hours a day for 180 days a year, and the tariff at HK\$1.2 per kilowatt-hour, the annual electricity bills would amount to HK\$946 - HK\$1,249, a difference of 24%.

As far as cooling capacity is concerned, a higher value means a faster pace in cooling. With the compressor of all models operating at full speed, the measured cooling capacity ranged from 4.91 kilowatts to 5.38 kilowatts. The findings closely matched the values claimed by the manufacturers. 3 models were found to have values higher than the claimed value by 1.5% or more. But 2 models were found to be 2.8% and 3.6% lower than the manufacturers' claims. Although the variations were within the 10% tolerance threshold under the MEELS and international practices, the Council stressed that consumers expect manufacturers to ensure the cooling capacity of air conditioners to be the values claimed, and not lower.

Excessive Confectionery Packaging

Excessive confectionery packaging has long been an astounding problem to cause harm to the environment, these products are also not value-for-money. As an ongoing effort, the Council collected 9 chocolate and sweet treats in festive gift packs before the Chinese New Year from major supermarkets and personal care product chains for analysis of their packaging and price.

The analysis clearly concluded that most festive gift packs remained excessively packaged. Over 40% of festive gift packs had doubled in their unit price or more, as compared with their standard packs of similar net weight. Moreover, the packing materials of 3 festive gift packs weighed more than a half of the whole pack, up to around 70%. These packaging materials would become household waste and a burden on landfills.

In the interest of sustainable development, the Council called on consumers to establish a "green" consumption concept and to discourage the practice of excessive packaging. The Council also recommended manufacturers to draw reference from overseas regulations on the reduction of over-packaging of products, and open up a design-minimal and environment-friendly gift pack market, giving consumers greener options.

冷氣機耗電量大，因此電費亦會較高。假設每年使用冷氣機180天，每天12小時，以每度電港幣1.2元計算，各樣本1年的電費由港幣946元至1,249元不等，相差可達24%。

在製冷量表現方面，數值越高表示製冷速度越快。各樣本的壓縮機在最高轉速運行操作的狀態下進行測試，量得的製冷量由4.91至5.38千瓦不等，大部分樣本量得的製冷量與其聲稱數值大致吻合。當中3款樣本比其聲稱值高出1.5%或以上；2款則比其聲稱低約2.8%及3.6%，儘管以上差別在強制性能源效益標籤計劃及國際慣常做法容許的10%公差範圍之內，本會相信消費者普遍期望產品的實際製冷量不會較其聲稱數值低。

節日禮盒過度包裝

過度包裝的節日禮盒除對環境有害，亦非物有所值。本會一直關注產品過度包裝的問題，這項調查在農曆新年前進行，於大型連鎖超級市場和個人護理用品店，搜集9款節日禮盒包裝的朱古力和糖果，並分析產品的包裝及售價。

分析結果顯示，大部分節日禮盒仍有過度包裝的問題。當中超過四成禮盒裝產品較同品牌重量相近的普通裝貴1倍。另有3款的包裝物料重量佔禮盒總重量的一半或以上，最高更達接近7成。這些包裝物料很可能會變成家居廢物，最終加重堆填區的壓力。

為助可持續消費的發展，本會呼籲消費者建立「綠色」消費觀，並以行動否定過度包裝的產品。此外，本會亦建議供應商參考海外就產品包裝所訂立的規範，以減少過度包裝，並開拓設計簡約而環保的禮盒市場，讓消費者有較環保的選擇。

Eco-Labels on Laundry Detergents

Eco-labelling on products provides information for consumers who are more environmentally concerned. In a study, the Council collected a number of laundry detergents with environmental claims from the market, and studied the eco-labels issued by third-party certification bodies. The study noted that some self-declared logos, with claims of “green”, “natural clean”, “renewable plant-based ingredients” might not be validated easily.



洗衣劑的環保標籤

產品上的環保標籤為注重環保的消費者提供了所需資訊。本會搜集了附有環保聲稱的洗衣劑，並檢視獲得第三方認證的標籤。研究發現，部分環保聲稱屬自我聲稱性質，如「綠色」、「天然潔淨」及「可再生植物來源成分」等，而消費者一般難以驗證該等聲稱失實與否。

消費者在購買有環保聲稱的洗衣劑前，應先搜集產品聲稱的資料，了解其環保標籤是否符合他們的環保期望，例如部分消費者希望多用源自植物成分的產品，而另一些則希望減少使用化學物質或容易刺激皮膚的物質等。



Without any short cuts, consumers shopping for environment-friendly laundry detergents were advised to research more about the product claims or eco-labels to ensure that the environmental claims were in line with their concerns such as increasing the use of plant-based ingredients, and reducing the use of chemicals or chemicals with irritation potential.

Besides, the Council also checked the prices and calculated the costs per wash load of laundry detergents with and without environmental protection claims. It was observed that the cost per wash load would be higher when using detergents with green claims than conventional detergents. The average expenses per wash load for green products ranged from HK\$2.2 to HK\$7.8, whereas that of conventional detergents from HK\$0.6 to HK\$1.0.

Consumers were urged to consider using ambient-temperature water and proper detergent dosage, reusing and recycling detergent containers, and buying product refills that are important behaviour in furthering sustainable consumption.



此外，本會檢視了標有環保聲稱和一般沒有環保聲稱的洗衣劑的大約售價，計算平均每次洗衣的費用。結果發現，有環保聲稱的洗衣劑每次洗衣費用大多較一般洗衣劑昂貴。若以平均1次洗衣費用計，環保洗衣劑每次約需港幣2.2元至7.8元，而一般洗衣劑只需約港幣0.6元至1.0元。

本會建議消費者選用室溫水洗衣，洗衣劑用量亦要適量。重用或循環再用包裝容器，以及購買補充裝等做法均可支持可持續消費。

