

節省能源

Energy Conservation



目標成效

Performance against targets

◆ 探討各項節約能源的措施

◆ *Explore various initiatives in energy saving*

有關為航空交通管制大樓（航管大樓）和備用航空交通管制大樓（備用航管大樓）的供電系統安裝諧波調節器以改善整體能源效率的建議，我們已進行詳細的成本效益研究。鑑於有關儀器的成本高昂，加上預期節省能源的效率不高，所以我們決定暫時擱置這個方案。

A detailed study on the cost effectiveness of installing harmonic conditioners to the electricity supply systems of the Air Traffic Control Complex (ATCX) and the Backup Air Traffic Control Complex (BATCX) to help improve the overall energy efficiency was carried out. However, in view of the high equipment cost and the expected low energy savings achievable, it was decided to put in abeyance this option.

為了節省空調系統的用電量，我們正物色適當的反光罩，以便安裝到備用航管大樓的精密跑道監察系統和微波儀器室，藉此降低室內的溫度。此外，我們亦為航管大樓的空調系統安裝化學物過濾器的可行性和成本效益一事，與機電工程署一同進行研究。安裝此類化學物過濾器，有助改善室內空氣質素，從而提高空調系統的整體能源效率。

In order to save energy on air conditioning, a suitable light reflective shade is now being identified for installation in the Precision Runway Monitor and Microwave Equipment Room of the BATCX to help lower the room temperature. We are also exploring with EMSD the feasibility and the cost effectiveness of installing some kind of chemical filters in the air conditioning system of the ATCX. The chemical filters can help improve the indoor air quality and hence raise the overall energy efficiency of the air conditioning system.

在節省照明裝置的用電量方面，我們正與機電工程署進行可行性研究，考慮以無需用電的自動發光標誌，取代航管大樓現有的出口標誌。

Regarding saving energy on lighting, we are exploring with EMSD the feasibility of replacing existing “Exit” signs in ATCX by self-luminous signs that do not require power.

We will continue to explore initiatives in energy saving. Apart from ATCX and BATCX of which the building management is under the purview of CAD, we have also conveyed our concerns of exploring energy saving initiatives to the building management organizations of

我們會繼續研究各項節約能源措施，除了留意由民航處負責管理的航管大樓和備用航管大樓的用電情況外，我們亦已就民航處設於金鐘道政府合署、香港國際機場客運大樓及機場空運中心的其他辦公室的用電情況，向有關大廈管理機構表達我們對採取節約能源措施的關注。

◆ **安裝更省電的電子鎮流器以更換航管大樓所有光管組件中的電感式鎮流器**

這項工程已獲中華電力有限公司（中電）批准納入用電需求管理計劃內。該項計劃由兩家電力公司和政府共同推行，藉此提升能源效益和節約能源。以電子鎮流器更換光管組件中的電感式鎮流器的工程於二零零一年四月展開，於同年五月完成。中電已按照用電需求管理計劃，向民航處提供港幣175,350元的回扣，款額相當於電子鎮流器的成本。估計使用電子鎮流器後，每年可節省電費達港幣六萬元。

◆ **購買具高能源效益的設備**

民航處是一個對環境負責任的機構。為了支持政府對保護環境的承擔，我們有義務遵循中央訂定的環保採購指引，在採購貨品和服務時一併考慮環保的因素。在適當情況下，我們會把回收性高和具能源效益等環保要求加入標書的細則中。

◆ **在二零零一年維持用電增長率低於香港國際機場的航機班次增幅**

在二零零一年，航管大樓的平均每日用電量為16,235千瓦小時，與二零零零年比較，增幅為2.3%。用電量上升，是因為更多使用雷達模擬器測試修訂航空交通管制運作程序，以配合重劃南中國海飛行空域，以及在七月至九月夏季期間一台額外鮮風櫃全日運作所致。不過，在二零零一年，備用航管大樓錄得的平均每日用電量為6,718千瓦小時，與去年比較稍微下降0.9%。

other CAD offices in the Queensway Government Offices (QGO), Passenger Terminal Building of HKIA and the Airport Freight Forwarding Centre (AFFC).

◆ ***Complete the installation of more energy efficient electronic ballasts to replace the electro-magnetic ballasts of all the fluorescent light tubes installed in ATCX***

This replacement work was approved by CLP Power Hong Kong Ltd for inclusion in the Demand Side Management Programme (DSMP) which was launched by the two power companies and the Government to promote energy efficiency and conservation. The work to replace the electro-magnetic ballasts of fluorescent light tubes by electronic ballasts started in April and completed in May 2001. Under the DSMP, CLP Power Hong Kong Ltd rebated HK\$175,350.00, being the cost of the electronic ballasts, to CAD. It is estimated that the use of electronic ballasts saves an energy cost of HK\$60,000 per year.

◆ ***Purchase equipment of high standard of energy efficiency***

As an environmentally responsible organization and in support of Government's commitment to environmental protection, we are obliged to observe central guidelines for green purchasing and take environmental considerations into account when procuring goods and services. Environmental terms such as high standard of recyclability and energy efficiency have been included in tender specifications whenever applicable.

◆ ***Maintain the growth in electricity consumption at a level below the traffic growth, in terms of aircraft movements, in 2001***

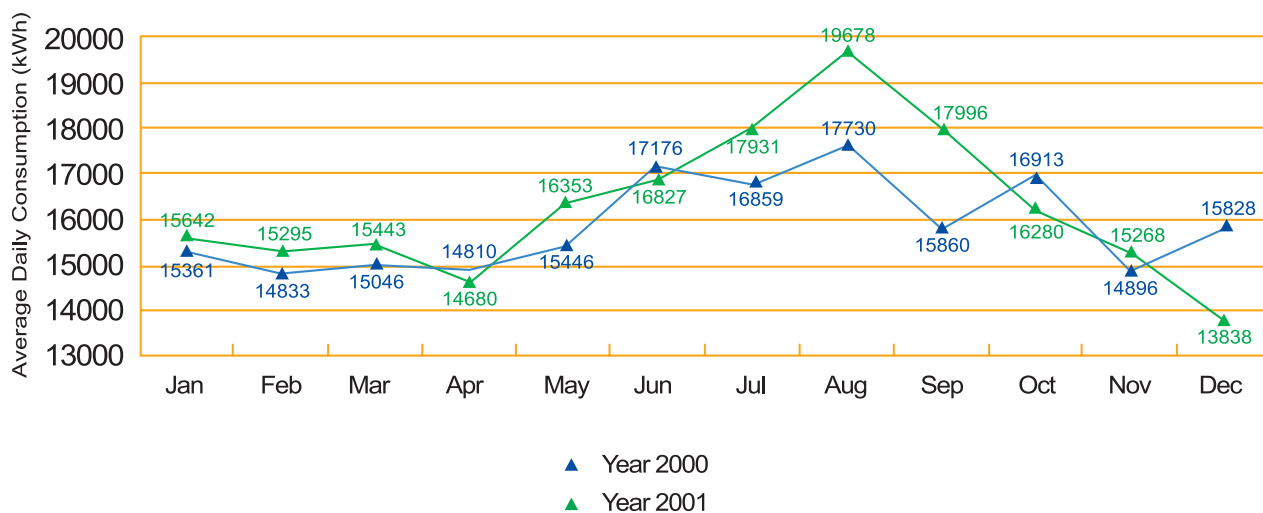
The average daily electricity consumption in ATCX in 2001 increased by 2.3% comparing to 2000, amounted to 16,235 kilowatt-hours. The increase could be attributed to the increased use of the radar simulator for testing the revised air traffic control operating procedures in connection with the re-organization of the South China Sea air-space, and the use of an additional fresh air unit round-the-clock during the summer months of July to September. The BATCX, however, recorded a slight decrease of 0.9% of average daily electricity consumption, amounting to 6,718 kilowatt-hours, in 2001.

在二零零一年，於香港國際機場升降的航機班次達196,820班，與二零零零年比較，增幅為8.2%。在二零零一年，整體用電增長率低於航機班次的增幅，達到預期的目標。與二零零一年的情況相若，我們就二零零二年所定的目標，同樣是維持用電增長率低於同年的航機班次增幅。我們會繼續加強員工的節約能源意識，並研究各項省電措施，確保達到目標。

In 2001, aircraft movement reached 196,820, represented a rise of 8.2% over 2000. Since the overall growth rate of electricity consumption in 2001 was below the traffic growth rate, this target is achieved. Similar to 2001, the target for 2002 will also be to maintain the growth in electricity consumption at a level below the growth of aircraft movement. We will continue to raise staff's awareness on energy conservation and to explore energy saving initiatives in order to ensure that the target will be met.

圖五－航空交通管制大樓的用電量

Diagram 5 - Electricity consumption in ATCX



圖六－備用航空交通管制大樓的用電量

Diagram 6 - Electricity consumption in BATCX

