

保護環境

OUR ENVIRONMENT



- 克服挑戰
Coping with Challenge
- 政策承諾
Policy Commitment
- 污水排放
Waste Discharge
- 新措施
New Initiatives
- 公眾的支持
Public Support
- 能源消耗
Energy Consumption



我們竭力愛護大自然，
善用天然資源。

WSD works in close
harmony with nature.





● 盡量減少濾水廠及配水庫排出的污水量是我們其中一項主要環保政策目標。(攝於深井濾水廠)
To minimize the discharge of effluent from water treatment works and service reservoirs is one of our key environmental policy objectives. (photo taken at Sham Tseng Water Treatment Works)

克服挑戰

本署奉行環保政策，其中節約能源是重要的一環，而我們亦要應付耗電量急升的問題。

耗電量急升，主要由於本港經歷了較長的乾旱期，以致本署須要轉運更多的原水並加以處理，滿足市民對食水的需求。

有鑑於此，我們迅速採取多項應變措施，將耗電量的淨增幅降至最低。這些措施包括妥善編排操作和維修時間，以及更換效益較低的機器和設備。

此外，透過控制辦公樓宇的用電量，以及改善樓宇設備的安裝設計，我們得以進一步節省電力。與此同時，海水供應系統採用了更多新水泵，使能源效益顯著提高。

我們亦採取了其他措施，務求提高能源效益，其中包括增加水泵的測試次數，以及研究其他新方法，例如增加使用變速抽水的技術。

在行政管理方面，我們一直鼓勵員工提供建議，藉此向員工倡導節約能源的意識。

政策承諾

為香港居民提供最優質的食水是本署的使命，正因如此，我們竭力愛護大自然，善用天然資源。

本署的環保政策目標包括：

- 盡量善用電力和燃料，以滿足運作要求；
- 減少辦公室用品的消耗，並降低在濾水過程中使用氯氣、石灰及明礬的劑量；
- 盡量減少建築工程對環境造成的影響；
- 盡量減少濾水廠及配水庫排出的污水量；
- 減少工場及化驗室的固體和液體廢物及化學廢料數量；

- 盡量減少配水系統的漏水量；
- 減少柴油機排放的廢氣和抽水站發出的噪音；及
- 嚴格遵行各項環保規例。

污水排放

本署繼續採取下列措施，以減少因排放污水、油污及固體廢物而對環境做成的影響：





Coping with Challenge

In our efforts at conservation as an integral part of our environmental policy, we had to cope with an unexpected increase in the use of electricity.

This was mainly because of the need to transfer more raw water for treatment to meet the demand for fresh water resulting from the prolonged dry spell.

Several measures were quickly taken to deal with the challenge, thereby keeping the net growth of electricity consumption to a minimum. These measures included the optimization of operations and maintenance schedules, and replacement of the less efficient plant and equipment.

In addition, further savings were achieved in the use of electricity in office buildings as well as improved designs of building services installations. There was also a noticeable rise in energy efficiency through the use of more new pumps in the salt water supply system.

Other steps taken generally to improve energy efficiency included the carrying out of more pump tests, as well as studies to promote new initiatives, such as the extended use of variable speed pumping.

Administratively, motivation and suggestion schemes were continued with the aim of promoting a conservation culture among staff.

Policy Commitment

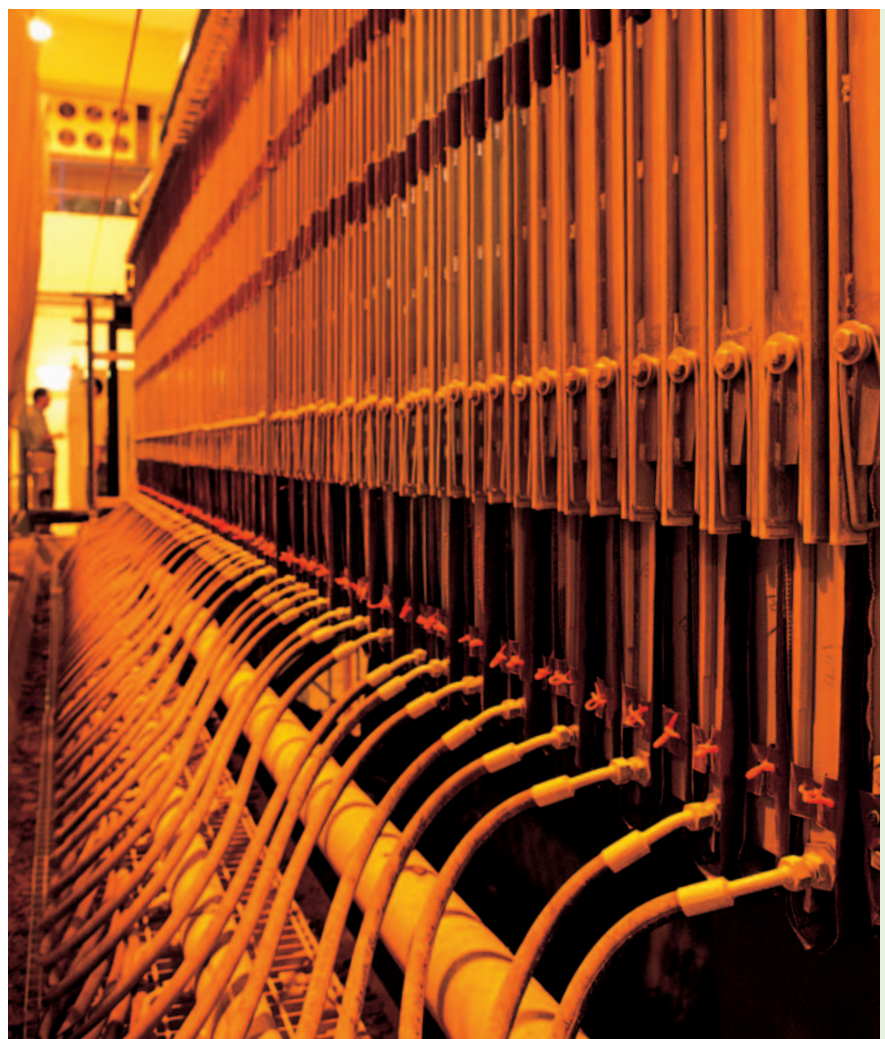
Given the task of supplying the people of Hong Kong with the highest quality of water, the WSD works in close harmony with nature to achieve this aim.

Among the objectives of its environmental policy are:

- optimizing the use of electricity and fuel to meet operational requirements;
- cutting down on the consumption of glossary items in office and the use of chemicals such as chlorine, lime and alum in water treatment;
- minimizing the environmental impact resulting from construction works;
- minimizing the discharge of effluent from water treatment works and service reservoirs;
- reducing the quantity of solid and liquid waste, as well as chemical waste, from workshops and laboratories;
- minimizing water leakage loss in the distribution system;
- reducing diesel engine emissions and pumping station noise; and
- strictly enforcing compliance with all environmental regulations.

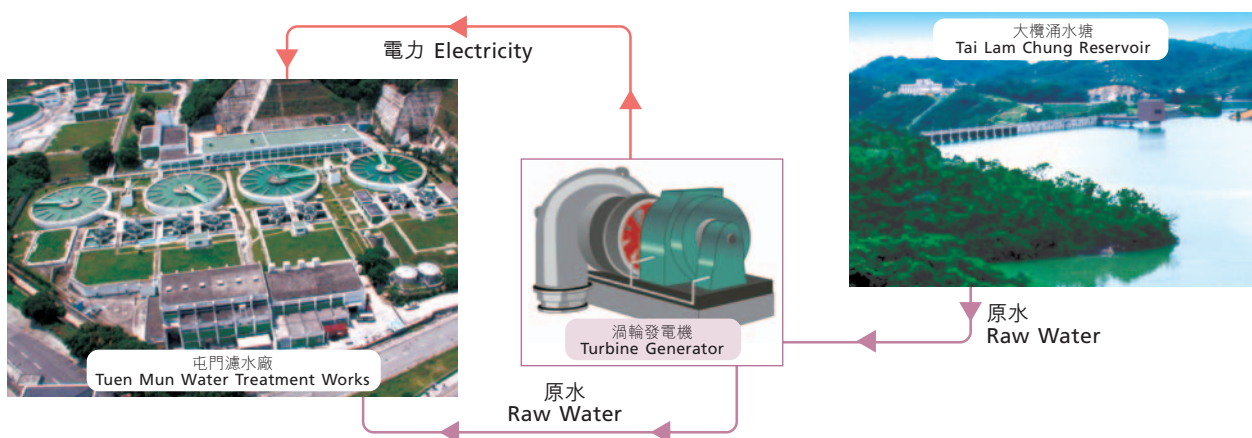
Waste Discharge

Actions are continually taken by WSD to deal with the discharge of effluent, oil and solid waste in order to reduce



將濾出的廢物製成泥餅的壓濾機。
Filter press for converting treatment waste into sludge cakes.

建議在屯門濾水廠裝置水力發電設施的示意圖
SCHEMATIC DIAGRAM OF A PROPOSED HYDRO PLANT AT TUEN MUN WATER TREATMENT WORKS



- 確保承建商妥善棄置建築及拆卸廢物，並遵守噪音及其他方面的規例；
- 把濾水廠濾出的廢物製成污泥餅，送往堆填區棄置；
- 適度調校化學品的投放量，盡量減少濾水時所產生的固體廢物；
- 採用氣體或真空斷路器，盡量減低煙油消耗；及
- 監察集水區的活動及水質。

新措施

隨著科技的革新，現時運用直列式水

力發電機再次進行水力發電，以及在水務設施上廣泛利用太陽能和風能，在經濟上已更為可行。本署準備採納一切在經濟和技術上均切實可行的合適措施。

公眾的支持

除了實行上述措施外，本署亦會繼續利用網頁和海報進行宣傳、舉辦展覽，以及為學校和屋邨管理人員舉行講座，藉此加強市民關注環保的意識。

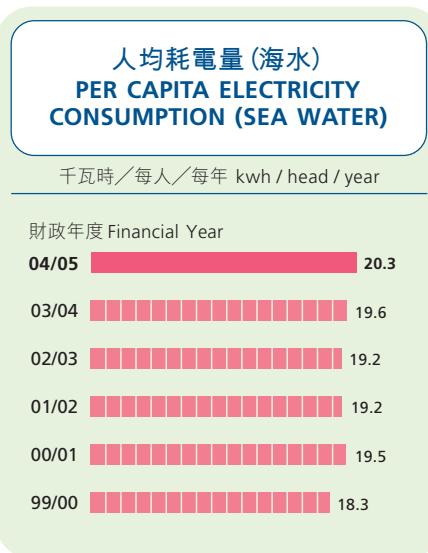
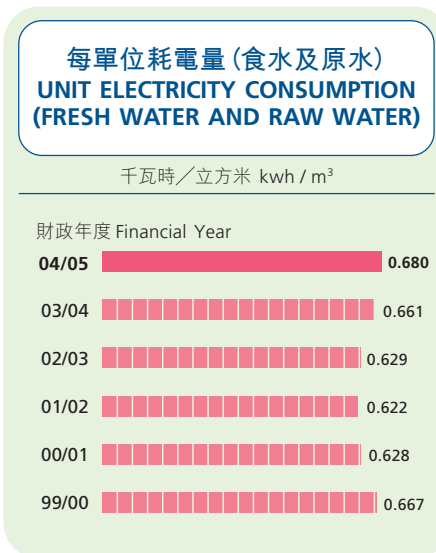
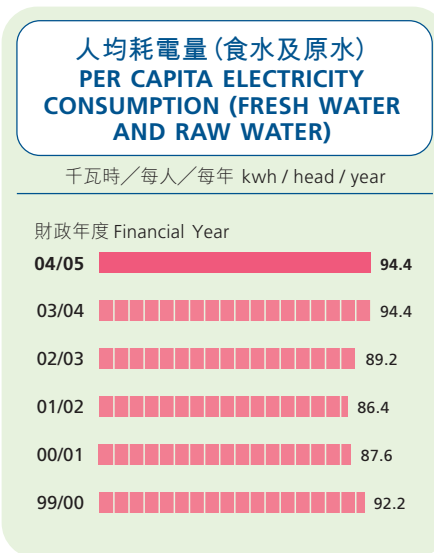
能源消耗

由「能源管理委員會」監察和統籌的多項節約能源措施，已在水務設施的運

作程序中落實。這些措施包括檢討新設施的設計標準，妥善編排供水設施的操作和維修時間表，定期監察供水系統的耗電量及運作效率，以及更換能源效益較低的機器和設備。

本署採用了更符合能源效益的燈光設備，並加強內務管理措施，使辦公室每單位樓面面積的耗電量得以創新低。本署的海水抽水系統採用更耐用的物料後，亦使耗電量有所減省。

關於能源消耗的一些統計數字詳列如下。





the environmental impact. They are:

- ensuring contractors properly dispose of construction waste and comply with noise and other regulations;
- converting treatment waste into sludge cakes for disposal at land fill;
- the more efficient use of chemicals for reducing solid treatment waste;
- reducing consumption of hydro-carbon by use of gas and vacuum circuit breakers; and
- generally, monitoring activities and water quality in water gathering grounds.

New Initiatives

With the advancement in technology, recovery of hydraulic power using in-line hydro generator and wider use of solar and wind energy in waterworks installations are becoming more economically feasible. WSD is ready to adopt whatever options that are appropriate and also economically and technically viable.

Public Support

Together with these activities, WSD will continue to promote public awareness of environmental concerns through the homepage and posters, holding exhibitions and giving talks at schools.

Energy Consumption

Various energy saving methods, overseen and co-ordinated by an Energy Management Committee, were put into effect in waterworks operations. These included a review of design standards of new installations, optimization of plant operations and maintenance schedules, regular monitoring of electricity consumption

and system performance, and replacement of less energy-efficient plant and equipment.

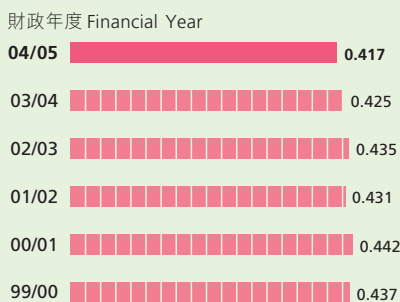
By use of more energy efficient lighting settings and adopting better housekeeping practices, electricity consumption per unit of office floor area was brought to a record low figure. There were also savings in electricity consumption through the use of more durable materials for sea water pumping systems.

Shown below are some statistical details of energy consumption.



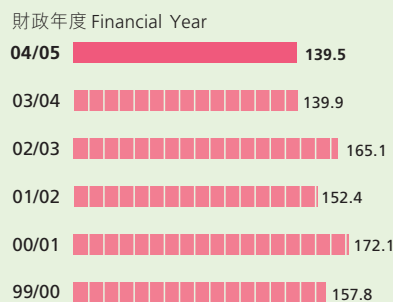
每單位耗電量 (海水) UNIT ELECTRICITY CONSUMPTION (SEA WATER)

千瓦時/立方米 kwh / m³



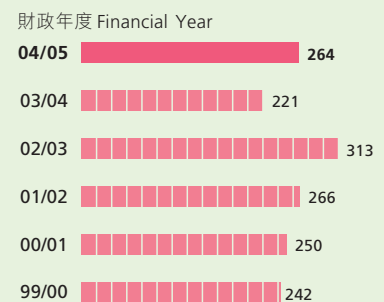
辦公室每單位樓面面積的耗電量 OFFICE ELECTRICITY CONSUMPTION PER UNIT FLOOR SPACE

千瓦時/平方米 kwh / m²



水泵測試次數 NO. OF PUMP TESTS

次數 Nos.



OUR ENVIRONMENT

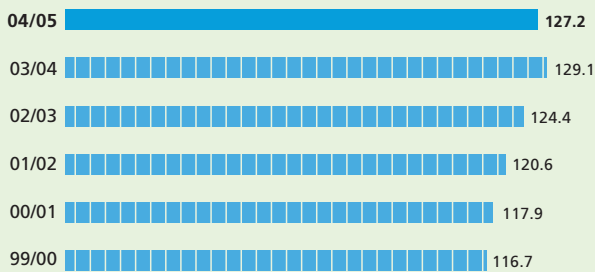
本署的使命之一是時刻關注對環境保護方面須負的責任。
It is our mission to remain conscious of our responsibilities towards the environment.



人均住宅食水耗用量
PER CAPITA DOMESTIC FRESH WATER CONSUMPTION

公升／日 Litres / day

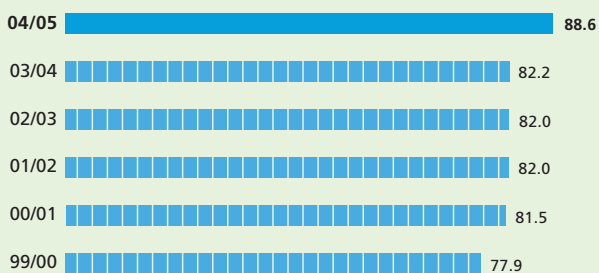
財政年度 Financial Year



人均沖廁水耗用量 (食水及海水)
PER CAPITA FLUSHING WATER CONSUMPTION (FRESH WATER AND SEA WATER)

公升／日 Litres / day

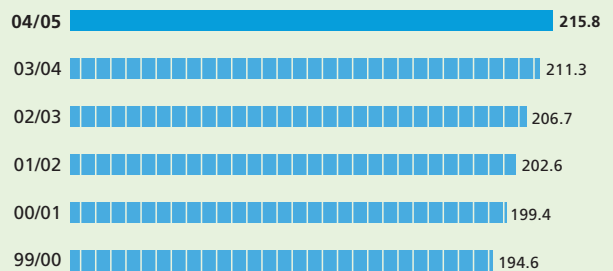
財政年度 Financial Year



總人均耗水量 (住宅及沖廁)
TOTAL PER CAPITA CONSUMPTION (DOMESTIC AND FLUSHING)

公升／日 Litres / day

財政年度 Financial Year

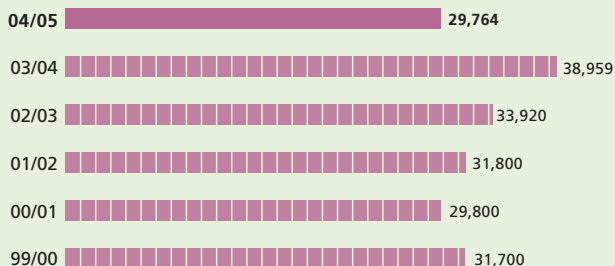




用紙量 PAPER CONSUMPTION

令 Reams

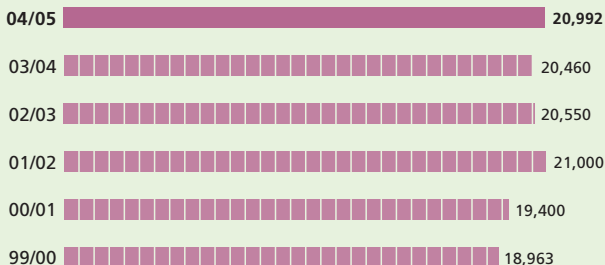
財政年度 Financial Year



通用表格及部門表格的用量 GF AND DEPARTMENTAL FORMS CONSUMPTION

千張 1000 Sheets

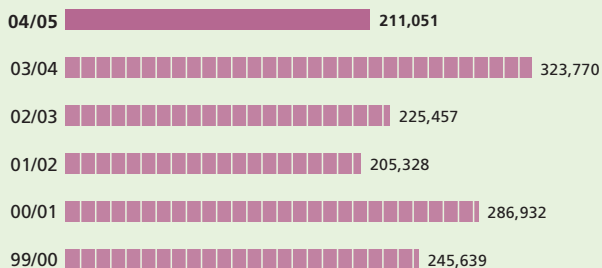
財政年度 Financial Year



信封用量 ENVELOPES CONSUMPTION

個 Envelopes

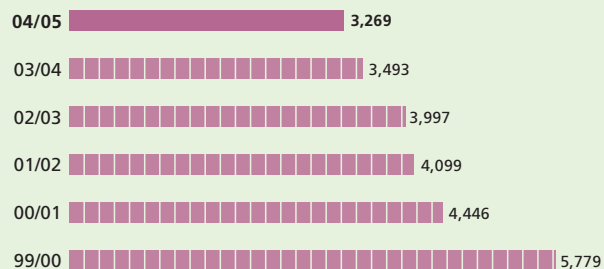
財政年度 Financial Year



柴油驅動泵組的操作時數 RUNNING HOURS OF DIESEL-DRIVEN PUMPSETS

小時/年 Hours / year

財政年度 Financial Year



設有柴油驅動泵組的抽水站 PUMPING STATIONS WITH DIESEL-DRIVEN PUMPSETS

個 Nos.

財政年度 Financial Year

