

As the first organisation in housing development in Hong Kong to be awarded the ISO14001 Certificate, the Housing Society has established a comprehensive Environmental Management System to manage all its environmental initiatives in a systematic manner.

Our Environmental Management System not only ensures environmental considerations are taken into account in all of our operations, but also contributes to our drive for a quality living environment for the Hong Kong community today and for future generations.

A quality living environment begins with quality planning and design. We have therefore incorporated a number of environmental initiatives in the planning and design of our housing projects, as well as in the rehabilitation of existing estates.

Design for a Quality Living Environment 締造優質 生活環境



房協是全港首個在房屋發展方面獲ISO14001認證的機構，具備一套完善的環境管理系統，有效管理轄下各項環保措施。

我們的環境管理系統，不但確保我們在營運上兼顧環保因素，更有助我們致力為今日以至未來的香港締造優質的生活環境。

優質的生活環境建基於優質的建築規劃和設計。因此，我們規劃及設計房屋項目，以至復修現有屋邨時，均兼備多項環保措施。

Environmental Architectural Design

An evaluation of environmental impact is included in the feasibility study undertaken for all our prospective housing developments. When evaluating different design options, we check through a list of environmental considerations, along with legal requirements and management concerns. Moreover, we continue our environmental review process as we move through the design and construction stages.

Design briefs for housing development project consultants also set out our environmental requirements. Guidelines and good practices from our Environmental Management System are included in the tender document for the contractors' attention. Their commitments and past performance in this regard are a critical consideration in our tender evaluation.

Examples of environmental considerations in our residential building design are as follows:

- Feasibility studies are conducted to maximise natural ventilation and lighting for optimal environmental comfort.
- Studies of block layout are undertaken to reduce flats' exposure to excessive traffic noise and noise barriers are erected where warranted.
- Architectural elements and purpose-built design features are introduced where possible for sun shading.
- Suitable areas and facilities for outdoor drying of laundry are provided and positioned away from kitchen exhausts as far as is practicable.



Energy-saving light fittings with timer control
備有時間掣的節能照明裝置

Communal areas and facilities are designed to maximise natural light
公眾範圍及設施盡量利用自然光



Landscaping for flat roofs to reduce solar gain
大廈天台加設花園具隔熱作用

環保建築設計

我們在所有房屋發展項目的可行性研究上，均會進行環境影響評估。在評估不同設計方案時，我們除了會考慮法定要求及管理事務外，還兼顧眾多環保因素。此外，我們在整個設計及建造過程中，亦會不斷評估對環境的影響。

我們提供給房屋發展項目顧問的設計簡介內，闡述了環保要求。我們亦將環境管理系統的指引和良好守則臚列在標書文件上，供承建商參考。他們在環保方面的往績和承諾是我們評審標書時的重要考慮因素。

下列是一些我們在設計住宅大廈時採用的環保措施：

- 進行可行性研究，盡量利用自然光和氣流來締造自然舒適的環境。
- 在屋宇位置設計上考慮地理因素，減少單位受到過量的交通噪音影響；並在需要時設置隔聲屏障。
- 利用建築元素和特定設計，作防曬用途。
- 安排適當位置和設施作戶外曬晾衣服之用，並盡量遠離廚房的排氣裝置。

- Energy-efficient lighting systems and fittings are installed at common areas, and timer controls are provided for staircases, landscape and external lighting systems.
- Photovoltaic lighting is used in landscaping new housing projects.
- For domestic bathrooms, low flush toilets and dual-flush cisterns are both adopted to reduce soil water discharge.

Continuing our pursuit of sustainable housing, these are only some of the endeavours which contributed to our winning the Quality Building Award in 2004.

Rehabilitation of Housing Estates

While our new projects incorporate various environmental features, existing estates also receive attention. Major rehabilitation is undertaken with a view to prolonging the life span of our buildings so as to conserve resources and minimise waste and environmental impact. Moreover, rehabilitation of buildings also helps to improve the living environment for residents.

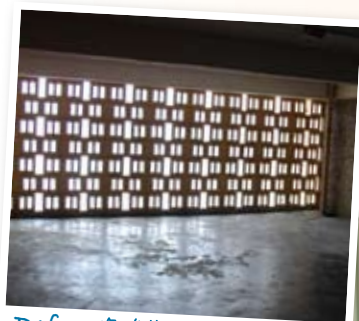
Rehabilitation of old estate to improve living environment and extend building life
復修舊屋邨以改善居住環境及延長樓宇壽命



Before 復修前



After 復修後



Before 復修前

Lobbies refurbished to improve natural lighting and ventilation
翻新大堂引入天然光和天然氣流



After 復修後

- 在公眾範圍內安裝節能照明裝置；在樓梯、花園及戶外照明系統則安裝時間掣，節約能源。
- 在新屋苑的花園採用太陽能光伏照明系統。
- 浴室採用低沖水廁具及雙掣式水箱，有效節省用水。

我們致力提供可持續發展的居所，並於2004年贏取「優質建築大獎」。上述只是其中的部份措施。

屋邨復修

我們的新發展項目固然具備多項環保設施，但我們亦關注現有屋邨的環保情況。我們為屋邨進行大型復修工程，不但可延長屋宇的壽命，更可保存資源，減少建築時所產生的廢物和對環境的影響。此外，復修屋邨更有助改善居民的居住環境。



Design for a
Quality Living
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締造優質生活環境

When planning for rehabilitation, various environmental factors are considered, such as whether the appearance of the refurbished estate or new structure will blend into the neighbourhood. The shape, colour and texture of the building or structure are among these considerations, along with ease of maintenance.

New features and measures introduced to improve the living environment of our housing estates include:

- **Machine-room-less lifts** – installed at some old estates to improve vertical circulation and minimise concrete works.
- **Pre-fabricated security gate systems** – added at entrance level to improve estate security.
- **Shower facilities** – incorporated in enlarged toilet facilities.
- **Drainage provision** – installed for window air-conditioner units.
- **Kitchen exhaust hoods** – installed to standardise the building facade and encourage tenants to fit ventilation systems.
- **Pre-fabricated planters** – installed to encourage tenants to grow plants in their living environment.

Standardised kitchen exhaust hoods for balance flues at existing estate
在現有屋邨加設標準廚房抽氣裝置



Before 復修前



After 復修後



Before 復修前

Enhancement of security system with natural ventilation
加強保安並顧及空氣流通



After 復修後



After 復修後

在籌劃復修項目時，我們同樣會考慮多項環境因素，例如復修後或新建造的建築外觀能否融入周圍的環境。除了方便保養等因素外，大廈或建築物的外型、顏色及質感等均在考慮之列。

改善屋邨居住環境的新設施及措施包括：

- **無須機房的升降機設施** — 在一些舊式屋邨安裝無須機房的升降機設施，改善人流上落各樓層及減少石屎工程。
- **保安閘門** — 在屋邨主要通道安裝組件式的保安閘門，改善屋邨保安。
- **花灑設施** — 在擴建的浴室內加設花灑設施。
- **排水裝置** — 為窗口式冷氣機提供排水裝置。
- **廚房外牆裝置** — 以便統一大廈外觀，並鼓勵住戶安裝抽油煙機。
- **花架** — 安裝預先裝配的花架，鼓勵住戶種植盆栽，綠化環境。

City Revitalisation

City revitalisation is one of our strategic approaches to urban renewal in Hong Kong.

Revitalising the Sham Shui Po MTR exits was the first project of this kind we undertook. Adhering to a "Green Lane" concept, we greened and beautified the three exits of the MTR station by replacing concrete pavement with reusable paving blocks, planting trees and providing benches and sculptures. Our work has helped to enhance the neighbourhood, receiving a very positive response and a good measure of applause from the Government, and most of all, the local community.



Works of sculptural art at the exits of MTR station serve as a landmark for the themed streets
地鐵站出口樹立配合主題街道的特色藝術雕塑作為地標



Street improvement to public areas at MTR exits at Sham Shui Po
為深水埗地鐵站出口的公眾地方進行活化工程



市區活化

在更新本市區面貌的工作上，市區活化是我們其中一項主要策略。

我們首項活化項目，是更新深水埗地鐵站的出

口。我們沿用「綠悠翠坊」的概念，綠化及美化地鐵站的三個出口範圍，包括鋪設可翻用地磚、栽種樹木、設置座椅和擺設雕塑。我們的工作大大改善地區環境，深獲政府及社區的支持和好評。



Following the success of the Sham Shui Po project, we set aside \$300 million for 16 other projects recommended by the Home Affairs Department. After cautious and thorough review of the proposed projects, eight have been earmarked for implementation, with the rest undergoing further examination.

We believe that through these projects we can not only effectively remove specific urban neglect or decay, but also help revitalise the local environment and townscape, bringing social, economic and environmental benefits to the residents and the community at large.

Building Environmental Assessment Method

In a bid to further our environmental performance, we review appropriate housing projects for participation in the Hong Kong Building Environmental Assessment Method (HK-BEAM).

An internationally recognised assessment and labelling scheme for buildings, HK-BEAM defines more than 100 environmental best practices for such key aspects of new and existing buildings as site impact, hygiene, comfort, amenities, materials, recycling and waste management, and energy management.

Participation in HK-BEAM helps to benchmark our environmental performance throughout the planning, design, construction, management and demolition lifecycle of our buildings.

隨著深水埗項目的成功，我們已撥款三億元，研究民政事務總署在轄下 16 個地區建議的項目。經過小心嚴格的審核，其中八項已獲正式通過，並開始展開規劃，其餘則有待進一步審議。

我們深信，這些項目不但有助紓緩舊區的老化及失修問題，更有助活化市區環境，為市民及社區帶來社會、經濟及環保等各方面的裨益。

「香港建築環境評估法」

為進一步提升環保成效，我們評估及挑選合適的屋苑項目，參加「香港建築環境評估法」。

該計劃是一個國際認可的建築物評估及認證計劃，詳列超過百項環保建築物的準則，包括新或現有建築物在環境影響、衛生、舒適、設施、物料、廢物回收及管理，以至能源管理等各方面的重要表現指標。

參與該計劃有助我們釐訂在規劃、設計、建築、管理及拆卸建築物的整個週期的環保成效。