

Buildings Department Environmental Report 1999

The Buildings Department's primary responsibility is to promote building safety, enforce building standards and improve the quality of private building development. The Director of Buildings is the Building Authority to administer and enforce the Buildings Ordinance. In addition to enforcing the required minimum safety and health standards, the Buildings Department (BD) has dedicated in 1999 to play a leading role to promote a more green environment in Hong Kong. Internally, we promote the importance of green management in our workplace.

Our Performance in 1999

In 1999, we put effort in promoting green initiatives:

1. **Working Group on Construction Efficiency and Environment**

In October 1999, we set up a Working Group on Construction Efficiency and Environment to review building and construction practices so as to identify opportunities to reduce construction and demolition wastes and to protect the environment through enhancement of construction efficiency.

The Working Group was chaired by the Director of Buildings and comprised building professionals, developers, contractors and government officials from various departments.

The following were achieved in 1999:

- (a) we issued a Practice Note on 'Construction and Demolition Waste' to authorized persons promulgating ways to reduce construction waste;

- (b) a working sub-group on Lean Construction was formed to study design, planning and construction efficiency aspects, precasting and prefabrication as well as minimizing the use of timber from non-sustainable sources, system formwork and composite construction.

2. **Provision of Floor Space for Material Recovery in New Buildings**

The current recovery rate for reusable and recyclable materials is low, especially in the domestic sector where it is only 8%. One reason for this low rate is that there is insufficient space within refuse storage chambers of most buildings for the separation and storage of such materials to permit recovery. One of our Policy Objectives in 1998 was to make it mandatory for the provision of floor space and facilities for separation of waste and material recovery in all new buildings so that transactions related to material recovery could be more profitable and sustainable.

To achieve this, we proposed in 1999 to introduce an amendment to the Building (Refuse Storage Chambers and Chutes) Regulations (RSC) making provision for material recovery chambers in new buildings. We also **proposed** that the space necessary to meet the requirements for RSCs and material recovery chambers will be disregarded from Gross Floor Area calculations for the purpose of the Building (Planning) Regulations.

3. **Consultancy Study on Lighting and Ventilation Requirements**

In July 1999, we appointed a consultant to conduct a study on the requirements of the building regulations. The aim of the study was to formulate a new set of standard which would adequately protect the health of occupants and ensure satisfactory quality of the indoor environment of all types of buildings in Hong Kong and yet would allow sufficient flexibility for functional and architectural design and allow for the optimum use of modern technology.

The consultant produced an Inception Report in December 1999. The Steering Group (comprising departmental and external members from various disciplines of

the building industry) then instructed the consultant to produce methodology, draft questionnaire and propose targets for site survey. These documents were submitted in April 2000. We estimate that the study will be completed by April 2001.

4. **Consultancy Study on Review of Buildings Ordinance and Building Regulations on Sanitary Fitments, Plumbing and Drainage Provisions for Buildings**

In 1999 we proposed a review to establish a new set of standards on the design, construction, operation and maintenance of sanitary fitments, plumbing and drainage provisions for buildings, taking cognizance of the local built environment, special local factors, environmental conservation aspects, living style, environmental science, building services engineering and building technology in the attainment of reasonable and adequate standards while allowing flexibility in building design.

Initial proposals were received from 15 interested consultants in response to BD's gazetted invitation. Consultants would be shortlisted for submission of their technical proposals.

5. **Review of OTTV Control**

A consultancy study in 1991 found that if the envelope of a building was constructed to a suitable overall thermal transfer value (OTTV), electricity demand from air-conditioning and thus the emission of greenhouse gases from power generation could be reduced.

Following the Government's aim to control the total energy consumption of a building, of which OTTV controls would form a part, legislative control over OTTV was introduced in the Building (Energy Efficiency) Regulation (Cap 123 sub. leg.) which came into effect on 21 July 1995. This regulation aims at reducing heat transfer through building envelope by requiring the external walls and roofs of a commercial or hotel buildings to be designed and constructed to have a suitable OTTV. Accepted levels of OTTV are given in the Code of Practice on OTTV, published in April 1995. When building plans are submitted, they must be accompanied by information and calculations as required by Building (Energy

Efficiency) Regulation 5.

We set up a Working Party in June 1998 to review the OTTV control. Recommendation papers were prepared by the Working Party in 1999 and comments from relevant stake holders would be sought.

6. **In-house green measures**

During 1999, the following initiatives were implemented:

Use less paper

- (a) Recycle paper boxes were placed on each floor to enable staff to make full use of the blank side of used paper;
- (b) All Practice Notes for AP and RSE, provisions of Buildings Ordinance and BD Operation Manual had been converted to electronic format following the introduction of Lotus Notes;
- (c) Wider use of computer program, e.g. Lotus Notes, and the introduction of the Government Office Automation Project has reduced the use of papers in internal communication;
- (d) The number of hard copy of publications from bureaux such as “The Civil Service Newsletter” required by our department is reduced by 63%.

Green Boxes

- (e) At our initiatives, the Building Management is considering the provision of several green boxes at the ground floor of the Pioneer Centre.

Way Forward

In the coming year, we will continue to introduce more green initiatives in the building industry. More vigorous approaches such as setting up a task force to promote the concept of

green buildings are in the pipeline.

Internally, we will continue to do our best to improve the green environment in our workplace. Increased use of computers as an internal communication mean will further reduce our consumption of paper. We will also encourage our staff to initiate and/or support green campaigns.

Buildings Department

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