

**LEGISLATIVE COUNCIL
PANEL ON PLANNING, LANDS AND WORKS**

**GREEN BUILDINGS -
A PROPOSAL TO ENHANCE THE QUALITY OF OUR LIVING**

Introduction

There are increasing expectations in the community for some of the environmental pressures brought about through urban development to be alleviated through better planned and more environmentally friendly building developments. The Buildings Department is responding to these expectations in a variety of ways, drawing on experience in other parts of the world where it is relevant to the situation in Hong Kong.

2. This paper seeks Members' views on the department's proposals for promoting green and environmentally friendly buildings.

Initiatives

3. In July 2000, the department established a Building Innovation Unit to facilitate the building industry in constructing environmentally friendly buildings. The Unit focuses on finding and promoting ways of gaining environmental benefits at every stage of the building's life cycle, including planning, design, construction and maintenance.

4. In September 2000, the department formed an inter-departmental working group to identify potential incentives that could be used to encourage the construction of green buildings and the means of implementing them. This working group will become a standing working group chaired by the Director of Buildings to take forward reforms for building development.

Green features

5. There are many green features that enhance the quality of our living. We consider that promoting green features such as the following in new building developments will have a positive impact on our environment:

- provision of balconies
- wider common corridors and lift lobbies

- communal sky gardens
- set-back of buildings
- prefabricated external walls
- solar panels
- water recycling facilities
- green construction methods
- automatic refuse collection systems
- green materials and
- energy efficient building services systems.

Incentives

6. We believe that incentives such as fast-track plan approval, exemption of green features from gross floor area (GFA) calculations, extra floor area for green methods of construction and a system for commendation of outstanding green buildings should be considered. Such a step will help build momentum in the market place and the demand of consumers for the construction of green buildings. The working group above is studying details of these proposals.

7. Our initial ideas for exemption from GFA calculations for different features are explained in the following paragraphs.

Balconies

8. We strongly advocate the construction of balconies which will enhance natural lighting and ventilation, provide individual flat occupiers with space for greenery and recreation, act as a sunshade and noise barrier and improve the architectural appearance of the buildings and townscape. GFA exemption for balconies would be set as a certain percentage of the total permitted GFA but with a minimum area for smaller flats and a maximum area for larger flats. Our intention is that the benefits of a balcony should be available to the average families in Hong Kong. This will represent a significant step in improving the quality of their living environment.

Wider common corridors and lift lobbies

9. The provision of wider common corridors and lift lobbies will alleviate the stuffiness often found in such spaces, allow ease of movement for people and large furniture, improve air quality and light intensity if provided with natural ventilation and lighting and possibly reduce electricity

consumption. We intend to accord GFA exemption to any corridor and lift lobbies enlarged to a certain stipulated width. Additional GFA exemption will be accorded to corridors and lift lobbies provided with natural ventilation and lighting.

Communal Sky Gardens

10. The provision of sky gardens in residential buildings will alleviate demands for ground level garden space. It will provide easily accessible recreational space for occupiers, improve air flow between buildings, help to disperse dust and heat at street level especially in the urban area, create an open vista for high-rise dwellers, and open up the walling effects of congested buildings by providing greenery at high level. To achieve this, we suggest these sky gardens should be at least 5 m high, open on all sides to encourage cross ventilation, and stocked with adequate greenery for the purpose of a garden.

Communal podium garden under footprint of commercial/industrial buildings

11. We intend to encourage podium gardens being provided under the footprint of commercial/industrial buildings by according similar treatment to that in paragraph 10 above.

Prefabricated non-structural external walls

12. Prefabricated construction methods will enhance the built quality of a building and at the same time reduce construction waste and noise and air pollution during construction. However, the design and construction of prefabricated non-structural external walls will render them slightly thicker and more expensive than conventional walls. We therefore intend to exempt from GFA calculations prefabricated non-structural external walls up to an appropriate thickness.

Other Green Features

13. Examples of other green features which do not take up extra floor space are:

- use of solar panels or photo-voltaic panels to make use of renewable energy;

- provision of water recycling facilities which reduce fresh water consumption and disposal of grey water;
- use of recyclable system form-work to cut down the use of timber; green materials such as fibre-reinforced polymer, pulverized fuel ash and radon blockage materials; and
- energy efficient building services systems such as electronic ballast for lighting installations, variable speed drive devices for air-conditioning and heating etc.

14. The above features will enhance the quality and environmental friendliness of a building and the micro-climate, but will incur extra initial cost for installation. In order to attract the industry to adopt such features, we intend to examine the possibility of providing compensatory GFA equivalent to the extra cost incurred.

15. Detailed guidelines and application procedures for GFA exemption for green features that take up additional floor area and those which do not but require extra cost will be provided to the building professionals and industry at a later stage.

Consultation

16. We welcome the views of Members on the initiatives, green features and incentives outlined above. We are also having a close dialogue with the construction industry, including professional institutes, contractors and developers as well as academia and other relevant bodies, on our proposals.

Buildings Department
November 2000