Progress Report on the Motion on

"Policies on sustainable urban development and green buildings" at LegCo Sitting held on 23 May 2007

Background

At the Legislative Council sitting on 25 May 2007, Prof Hon Patrick LAU Sau-shing moved a motion on "Policies on sustainable urban development and green buildings" with the following wording:

"That, in view of the United Nations' earlier warning that within this century, global warming will cause hundreds of millions of people to face disasters such as fresh water shortage, famine, flooding, diseases, and the rise in sea level will even pose a threat to the coastal lands in Asia including the Pearl River Delta region, from which Hong Kong can hardly be immune; in order to alleviate the greenhouse effect arising from imbalanced urban development and to eliminate the adverse effects of undesirable high-density building developments on weather and the environment, this Council urges the Government to expeditiously formulate and implement policies on sustainable urban development and green buildings, including:

- (a) reviewing the existing legislation relating to urban planning and buildings, and introducing sustainable planning and green building principles;
- (b) studying the formulation of a Code of Practice for introducing a 'green building labeling' system, and fully assessing the environmental performance of buildings during the design stage and after their being put to use on the basis of energy efficiency, greening ratio, air ventilation, renewable energy, household waste treatment and design parameters which are conducive to good weather and urban environment; and
- (c) the Government and public organizations taking the lead in fully applying the relevant policies to both new and existing public buildings, educating the public, and offering incentives to actively promote market compliance,

so as to alleviate the impact of global warming on Hong Kong and to build a pleasant city which is sustainable through the implementation of policies on urban development and green buildings that are conducive to good weather and environment."

2. This paper aims to inform Members of the latest development of the various measures.

Measures related to town planning

- 3. While responding to the motion, the Government confirmed that "sustainable development" is an important policy objective and guiding principle for the Government of the Hong Kong Special Administrative Region and pointed out that the First Sustainable Development Strategy for Hong Kong, announced by the Government, covers measures for this cause. They include continuous enforcement and regular review of existing guidelines on sustainable urban design and carrying out of studies on the formulation of strategies to further promote sustainable building design.
- 4. Land resources in Hong Kong are very limited. To realize sustainable development of the community, our town planning aims to guide and properly control development and use of land so as to provide a quality living environment and to promote economic development.
- 5. The Town Planning Board is responsible for the preparation of statutory plans in respect of land uses in accordance with the guidelines under the Hong Kong Planning Standards and Guidelines, with a view to promoting the health, safety, convenience and general welfare of the community.
- 6. The purpose of the Hong Kong Planning Standards and Guidelines is to provide basic planning criteria and design guidelines to balance the needs for social and economic development as well as the impact of such development on the urban environment. The Guidelines also provide guidance on various types of development concerning the scale, intensity, site requirements, supporting facilities required, environmental planning, conservation of natural landscape and habitats, as well as preservation of cultural heritage and urban design. The aim is to enhance the quality of life of Hong Kong residents.
- 7. The Government will review the Hong Kong Planning Standards and Guidelines from time to time, in the light of its policies and changing community aspirations to cater for prevailing social needs. Since 2002, the Administration has totally reviewed 34 items, covering planning standards and criteria on different realms and has incorporated new guidelines. For example,

in order to assess the impact of development on pedestrian wind environment, we incorporated last year the latest guidelines on air ventilation to provide guidelines on air ventilation consideration for developments.

8. In addition to the updating of the Hong Kong Planning Standards and Guidelines, we also review, revise and update the existing Outline Zoning Plans and formulate new Outline Zoning Plans in accordance with the statutory procedures under the Town Planning Ordinance. The coverage includes specific land use zones and relevant development parameters in the concerned Outline Zoning Plans.

Measures related to the Buildings Ordinance

- 9. Encouraging and promoting green buildings is one of the Government's sustainable development policies. With the aim to providing convenient facilities for residents and users and improving their domestic living environment, the regulations under the extant Buildings Ordinance provide for the design and construction standards of buildings in respect of indoor lighting and ventilation, refuse storage and material recovery chambers as well as energy efficiency.
- 10. To encourage the industry to design and construct environmentally-friendly buildings, the Buildings Department, together with the Planning Department and Lands Department, have issued two sets of Joint Practice Notes to provide concessions on gross floor areas in order to promote the incorporation of various green features in new buildings, including balconies, sky gardens and non-structural prefabricated external walls. features help promote greening and environmental protection, as well as minimize energy consumption as well as construction and demolition waste, thus foster a more comfortable living environment for the residents.

Measures related to Comprehensive Environmental Performance Assessment Scheme for Buildings

11. To promote and encourage green buildings and to provide relevant design guidelines, the Buildings Department commissioned a consultancy study and promulgated a Comprehensive Environmental Performance Assessment Scheme for Buildings. The Scheme gives recognition to buildings with good environmental performance in respect of planning, design, construction and management through the establishment of a green building labeling system. It aims to utilize the market force to motivate building developments to pursue

better environmental performance and grading.

12. Under the Assessment Scheme, a wide range of environmental performance elements will be assessed, including indoor environmental quality; building management and amenity performance; resources and energy use; environmental loadings discharged from buildings and waste management; as well as relationship among buildings and amenity/green areas. Assessment is conducted throughout the entire building life cycle which covers the planning, design, construction and demolition stages as well as building operation after occupation.

Measures related to public building projects and public housing

- 13. The Government has been adopting sustainable designs in public building projects with the targets to achieve: harmony between buildings and their surroundings; effective use of land; conservation of natural resources; energy saving; and greening the environment. To this end, we have implemented various measures. Details of such measures are explained as follows:
 - (a) In planning for new Government buildings or improving existing ones, the Government will, as much as possible, dovetail with the existing terrain and surroundings so as to minimize land formation; make good use of natural lighting and ventilation through arrangement of building disposition; and preserve existing landscape and avoid tree felling as far as practicable;
 - (b) On greening, we will enhance the greening and landscape design of new Government buildings in order to dovetail with the strategy of the Greening Master Plan of urban areas and maximize green areas in existing Government buildings. Green roofs will be incorporated in the design of new Government buildings as far as practicable. There are currently about 30 such projects, including schools, office buildings, hospitals, prisons, community centres, cultural and recreational facilities, etc., which are under planning or construction;
 - (c) On material specification, the Government has introduced various new requirements which uphold environmental protection and sustainability principles, such as the requirement on usage of certified timber from authorized sustainable forest plantations, recycled aggregate and low-volatile organic compounds paints;

- (d) On energy conservation, the Government will continue to improve the design of new Government buildings. We have fully adopted the use of energy efficient features, including energy efficient fluorescent lighting and air conditioning installations. We have also actively promoted the use of renewable energy in Government buildings, including the adoption of solar energy systems and solar water heating systems. The Sheung Shui Slaughterhouse, the Hong Kong Science Park and the headquarters of the Electrical and Mechanical Services Department are buildings where energy efficiency fittings have been installed in a large scale; and
- (e) As to public housing, the Hong Kong Housing Authority has formulated a Strategy for Sustainable Construction and the related work targets. The Authority has applied them to different aspects such as design, procurement, construction, utilization and demolition, in order to incorporate advanced technology on sustainable building and environmental protection. Examples include adopting environmentally friendly building services, such as piloting the use of solar powered lamp poles; enhancing greening by adopting rooftop and vertical greening design in selected buildings; using pre-cast components to minimize the amount of construction materials used and waste; encouraging at-source separation of domestic waste in residential buildings; and formulating construction waste index and guidelines for selective demolition to minimize and properly disposal of construction waste in public housing.
- 14. We will continue to follow up the above measures and conduct timely reviews in order to promote sustainable development and build ourselves a sustainable and environmentally friendly city.

Development Bureau

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