

**Analysis and Reporting of the Public Engagement Exercise  
of the Council for Sustainable Development: Building Design to  
Foster a Quality and Sustainable Built Environment**

**FINAL REPORT**

Submitted by

Public Policy Research Institute  
The Hong Kong Polytechnic University

June 2010



THE HONG KONG  
POLYTECHNIC UNIVERSITY  
香港理工大學

## CONTENTS

	<b>Page</b>
EXECUTIVE SUMMARY .....	i
CHAPTER 1: INTRODUCTION .....	1
BACKGROUND .....	1
OBJECTIVES OF THE PUBLIC ENGAGEMENT EXERCISE .....	1
CHAPTER 2: METHODOLOGY .....	3
DATA SOURCES .....	3
DEVELOPMENT OF ANALYTICAL FRAMEWORK .....	4
CODING AND DATA ANALYSIS .....	5
CHAPTER 3: ANALYSIS AND SUMMARY .....	8
THEMES AND FREQUENCIES .....	8
FREQUENCY COUNTS OF THE NUMBER OF TEXT UNITS .....	9
ANALYSIS .....	12
SUMMARY .....	18
CHAPTER 4: SUMMARY OF VIEWS COLLECTED .....	19
SUMMARY OF VIEWS COLLECTED .....	19
<i>Theme 1: Characteristics/Definitions of Sustainable Built Environment.....</i>	<i>20</i>
<i>Theme 2: Building Separation .....</i>	<i>24</i>
<i>Theme 3: Building Setback .....</i>	<i>30</i>
<i>Theme 4: Greenery Coverage.....</i>	<i>37</i>
<i>Theme 5: Gross Floor Area (GFA) Concessions.....</i>	<i>45</i>
<i>Theme 6: Energy Efficient Building Design and Installations .....</i>	<i>67</i>
<i>Theme 7: Building Height.....</i>	<i>80</i>
<i>Theme 8: Overall Trade-offs.....</i>	<i>84</i>
<i>Theme 9: Roles of Key Stakeholders.....</i>	<i>87</i>
<i>Theme 10: Public Engagement Exercise Process.....</i>	<i>94</i>
<i>Theme 11: Other Views Raised.....</i>	<i>101</i>
ANNEX: LIST OF PUBLIC ENGAGEMENT EVENTS.....	114

## **EXHIBITS**

**Page**

---

Exhibit 1: Data Sources for Analysis.....	3
Exhibit 2: Development of Analytical Framework and Coding Process.....	6
Exhibit 3: Schematic Coding Tree for Data Analysis.....	7
Exhibit 4: Eleven Key Themes of Views Collected (in Descending Order) .....	8
Exhibit 5: Number of Text Units and Average Number of Text Units by Data Source.....	9
Exhibit 6: Top 30 Categories of Views (in Descending Order).....	10
Exhibit 7: Bar Chart Showing Top 30 Categories of Views (in Descending Order).....	11

## **EXECUTIVE SUMMARY**

1. The following presents a summary of the findings of the Public Engagement (PE) Exercise on Building Design to Foster a Quality and Sustainable Built Environment, carried out for the Council for Sustainable Development by the Public Policy Research Institute of The Hong Kong Polytechnic University.
2. The public involvement phase of the exercise was conducted between 20 June and 31 October 2009. A total of 47 public engagement events was conducted, comprising five regional forums and 42 engagement events held by various parties. Views expressed in these events are recorded in the 47 event records. Other documents analysed include written submissions<sup>1</sup> from letters, emails, view collection forms and online discussion forum records, as well as relevant media reports. A total of 1,612 pieces of documents was analysed.
3. Every document was content analysed, and every sentence or group of sentences in those documents expressing a particular point of view was coded as a “text unit” and entered into a qualitative data analysis computer software for indexing. The number of associated text units is presented in brackets in this report where appropriate.

## **ANALYSIS OF RESULTS**

4. The PE exercise solicited responses from a wide range of stakeholders with many different opinions expressed. A total of 6,554 text units extracted was grouped under 11 themes and 62 categories. Amongst the 11 themes, the top two themes with the most text units are “GFA Concessions” (1,709 text units) and “Energy Efficient Building Design and Installations” (1,246 text units).
5. Views expressed are summarised below:

### **Definition of a Sustainable Built Environment (221 text units)**

6. There are many views (221) on what defines a sustainable built environment, which, taken together, are about: taking a holistic approach, and achieving a balance among environmental, social and economic issues, and maintaining harmonious interaction between humans and their environment (111); specific design details such as building separation, setback of buildings and enhancement of greening of buildings, and using

---

<sup>1</sup> Written submissions received up to 27 November 2009 were also taken into account in this Report.

technology to support energy-efficient designs and installations (29); adopting people-oriented designs, providing a healthy, safe and enjoyable environment for the building users as well as the general public (15); causing no harm to and relying on the natural environment (10); minimising overall negative impact to the community and future generations (8); being resource conscious (8); suitable spatial planning (6); giving detailed consideration to the complete building lifecycle (5); engaging the public (4); lowering development density (4); and maintaining the characteristics of the district, as well as protecting the surrounding environment and heritage sites (3).

### **Building Separation (307 text units)**

7. Majority of the responses received (136 responses for, 10 against) are in support of mandatory building separation, suggesting that legislation is necessary to ensure compliance. Many standards have been proposed as well as a flexible approach in which standards should vary with geographical areas.

### **Building Setback (171 text units)**

8. Most of the views collected (46 for, 11 against) are in favour of mandatory requirements for building setback so as to improve pedestrian environment in narrow streets. Those against mandatory setback expressed that it would discourage developers from redeveloping old buildings, that it might not be appropriate for small sites, and that it might not result in improved air quality.
9. Comments generally favour implementing setback with proper urban design, taking into account the local environment of each area, each building and factors such as building separation, building height and bulk, greenery coverage, car parks and pedestrian environment.

### **Greenery Coverage (584 text units)**

10. Most of the views collected (136 support, 10 against) are in favour of mandatory requirements on greenery coverage.
11. Many suggestions (217) were made on greenery coverage, including comments on green roof (113), sky gardens (37), vertical greenery (30), and greenery ratio (27).

## **GFA Concessions (1,709 text units)**

### **GFA Concessions in General**

12. Forming a relatively small part of all the views concerning GFA concessions, the views on GFA concessions as an incentive for different building features show no consensus on this issue (75 support, 80 against). Responses in favour see the concessions as promoting desirable and essential features and innovation, and that they can provide genuine benefits to the community. There are concerns that a more stringent GFA policy would result in lack of flexibility, underprovision of desirable features and facilities and increased flat prices. Those against see concessions as unnecessary and resulting in bulkier buildings. There are suggestions that essential and green features should be mandated. There are perceptions of transfer of benefit to developers through GFA concessions.
  
13. On the other hand, the majority of responses concerning GFA concessions are made on specific concessions: green features (304), car parks (194), essential features (128), amenity features (88), and public passages (56). Views fall into two types: essential features (65 for, 42 against) and public passages (32 for, 9 against) receive more support than opposition; while the reverse is the case for amenity features (15 for, 49 against), car parks (23 for, 80 against) and green features (92 for, 113 against). Reasons for supporting specific concessions include their essential nature and social and environmental benefits; reasons against include abuse by and benefit to developers, and the need to review scope and standards (car parks). There are suggestions to build car parks underground to avoid the bulky building effect, but concerns are also expressed that this would increase energy consumption. There are also concerns that the end-users and developers benefit from certain features at the expense of the community.

### **Capping GFA Concessions**

14. Most support (220 support, 49 against) capping GFA concessions to avoid bulky buildings. Of these supporting views, the majority are for an overall cap. Those oppose fear that capping would discourage innovations and the adoption of environmental-friendly features.

### **Transparency and Accountability**

15. Many (134) call for the system to be improved through more transparency and accountability. Concerns are expressed on the discretionary powers of the Director of Buildings, and suggestions are made to enhance monitoring measures to oversee the granting of concessions.

### **Energy Efficient Building Design and Installations (1,246 text units)**

#### **Mandatory Requirements**

16. There is predominant support for mandatory requirements on energy efficiency in buildings (41 support, one against).

#### **Energy Efficiency and Renewable Energy**

17. There are many responses (417) on improving energy efficiency, especially on the use of renewable energy (205), including advocating the two electricity companies to use wind turbines and solar power more extensively, and to actively participate in energy efficiency projects amongst building users.

#### **Energy Savings**

18. Many suggest energy saving measures for decorative and public lighting (154) and air-conditioning (47).
19. Many (386) suggest a variety of other energy-saving ideas, including the use of eco-friendly building materials (104), better heat insulation (73), recycling of waste (44), energy efficient construction methods (35) and other improvements in use of natural lighting, natural ventilation, and new technologies.

#### **Subsidies/Financial Support**

20. Some (51) suggest that Government should provide subsidies and financial support for energy efficient building design and installations.

## **Education**

21. Many (73) support educating the public on energy saving and sustainable development and thereby changing habits and culture.

## **Building Height (284 text units)**

22. Opinions are somewhat divided (91 for, 107 against) over whether or not Government should limit building heights. There are suggestions that they should be set either in absolute terms – e.g. 20 to 40 storeys – or more flexibly, with reference to coastal or other sites, with layering of those nearer the coast. Those in favour see height limits as facilitating better ventilation and protecting the ridgeline. Those against are concerned about its impact on the supply of flats and its effectiveness in improving air ventilation in the area.

## **Overall Trade-offs (120 text units)**

### **Short Term vs Long Term Benefits**

23. Many responses (67) recognise the long-term social and economic benefits of sustainable development as well as the short-term costs (including loss of Government revenue) and the unwillingness of end-users to meet these costs.

### **Specific Stakeholders' Interests vs Public Interests**

24. Many (53) discuss the need to achieve a balance between specific stakeholders' interests and public interests.

## **Roles of Key Stakeholders (548 text units)**

### **Government's Role**

25. Many (446) responses focus on Government's role. The prevailing view is that Government should be more responsive to problems (78), provide more incentives and enforce penalties to encourage sustainable features (63), take the lead on sustainable development (51), and setting good examples in publicly funded buildings (12).



26. There is concern (25) that Government should improve the coordination and efficiency of different government departments in implementation. Some also express concerns about Government's lack of impartiality (26), accountability and transparency (39).

### **Developers' Role**

27. Many (74) discussed the role of developers: comments range from wanting developers to do more to develop a sustainable built environment to the view that developers are simply operating within the law and responding to market demands.

## **Public Engagement (PE) Exercise Process (246 text units)**

### **The PE Process**

28. Some (15) welcome Government's efforts to engage the public and other stakeholders on what is recognized as a very complicated but important issue. A few (3) have reservations that the consultation will solicit uneducated answers, or may not be able to balance properly the different views expressed.

### **The Invitation for Response (IR) Document**

29. Many comments on the IR document are polarised (118) – some find it too technical and specialised; while others find it over-simplified on the complicated issues; some find it over-focused on new buildings only. Some comment that Government should not ignore responses outside the scope of the IR document received through the consultation exercise. A few (3), however, find that the IR document provides valuable information for the general public.

### **Education and Action**

30. Some (22) emphasise the importance of educating the public on sustainable development. Some (17) are eager to see Government departments taking actions to implement the results of the exercise.

## **Other Views Raised (1,118 text units)**

### **Review the Building Regulatory Framework**

31. Some (81) perceive the Buildings Ordinance as outdated. Some (114) urge Government to carry out regular reviews of the ordinance and other relevant regulations, practice notes, etc.

### **Holistic Approach to Urban Design**

32. Many (155) support a holistic approach to urban design. This would include, for instance, considering broader social issues of town planning, mobility, regeneration of old areas, economic return, benefits to the community, considering building development proposals in the context of the neighbourhood and district based policies. It should involve the public. Three-dimensional planning should also be used.

## **SUMMARY**

33. There is general support for achieving a quality and sustainable built environment through building separation, building setback, greenery coverage, and energy efficiency. There is general concern over building height and bulk.
34. There are different views on GFA concessions as an incentive for different building features, with more supporting concessions being granted for essential features and public passages and more against concessions for amenity features, car parks and green features. Most support capping GFA concessions. Among those in favour of capping GFA concessions, there is predominant support for an overall cap.
35. There is a general support for a holistic approach to regulating building development which takes into account the long-term needs of the community and of the local environment. There should not be a one-size-fits-all approach.
36. In terms of the regulatory framework, there is general support that Government should undertake a review of the tools -- e.g. Outline Zoning Plans, plot ratio and lease conditions, the regulatory framework for buildings and GFA concessions -- to ensure they all work together to meet the objectives of developing a quality and sustainable building environment.

## **CHAPTER 1: INTRODUCTION**

### **BACKGROUND**

- 1.1 The Government of the Hong Kong Special Administrative Region (the “Government”) commissioned the Public Policy Research Institute (“PPRI”) of The Hong Kong Polytechnic University to collect and analyse public views received during the public engagement (“PE”) exercise carried out by the Council for Sustainable Development (“the Council”) on Building Design to Foster a Quality and Sustainable Built Environment. This Report summarises the results of the PE activities conducted between 20 June and 31 October 2009 as well as written submissions received up to the extended cut-off date of 27 November 2009.
- 1.2 The Council’s engagement process comprises the following five stages:
- (a) identification of priority areas;
  - (b) preparation of the Invitation for Response Document 2009 (the “IR document”) to invite public responses;
  - (c) community engagement with independent collection and analysis of the community’s views;
  - (d) reporting of community’s views and the Council’s recommendations to Government; and
  - (e) Government response and action.
- 1.3 At the end of the engagement exercise, the Council will submit a report with recommendations to Government with reference to the public views gathered.

### **OBJECTIVES OF THE PUBLIC ENGAGEMENT EXERCISE**

- 1.4 The objectives of launching this PE exercise are as follows:
- (a) to foster public awareness and understanding of the issues concerned by presenting the established Government policies and measures in respect of the following three areas:

- (i) enhancement of sustainable building design in terms of building separation, building setback and greenery coverage in building developments;
  - (ii) provision of essential, green and amenity features in buildings and gross floor area (“GFA”) concessions; and
  - (iii) building energy efficiency;
- (b) to understand and analyse the community’s perception and expectation of a green and sustainable living environment including views on enhancement of sustainable building design, GFA concessions and building energy efficiency;
  - (c) to present proposals in addressing these problems and steps to achieve a quality and sustainable built environment;
  - (d) to invite views from stakeholders and the general public on various proposals; and
  - (e) to formulate the Council’s recommendations on fostering a quality and sustainable built environment, after taking into consideration the views of stakeholders and the general public.
- 1.5 As the independent analysis and reporting agency, the PPRI is responsible for collecting and analysing views received during the PE exercise.
- 1.6 The Consultancy Team was led by Professor Peter Yuen, Director of PPRI. Other members included Professor Lee Ngok, Professor Edwin Chan, Dr. Anthony Lok, Dr. Florence Ho, Dr. Artie Ng, Dr. Vincent Law, Dr. Jason Chan, Mr. Robert Footman, Ms. Judy Li, Miss Linda Suen and Miss Queenie Tam.

## CHAPTER 2: METHODOLOGY

### DATA SOURCES

- 2.1 The PE exercise was conducted from 20 June to 31 October 2009. Written submissions received up to 27 November 2009 were included in this report.
- 2.2 Data were collected from three sources as shown in **Exhibit 1**. A total of 47 PE events was conducted, comprising five regional forums and 42 engagement events held by various parties as listed in the **Annex “List of Public Engagement Events”** in chronological order. Written submissions collected from other sources, i.e. letters, emails, view collection forms and online discussion forum, as well as relevant media reports were also analysed.

#### Exhibit 1: Data Sources for Analysis

Item	Data Source	Quantity
1	Records of public engagement events (5 public regional forums, 42 engagement events)	47
2	Written submissions: (a) Submissions by letters or emails: <ul style="list-style-type: none"> <li>• 41 submissions from organisations</li> <li>• 752 submissions from a photo competition</li> <li>• 150 submissions from a local secondary school</li> <li>• 95 responses to a questionnaire designed by a local university</li> <li>• 226 other submissions</li> </ul>	1,264
	(b) Completed view collection forms collected at public regional forums	37
	(c) Submissions collected from online discussion forum	108
3	Media reports (30 in English, 126 in Chinese)	156
	Total:	1,612

- 2.3 Out of all the 1,612 documents, 150 submissions were received from a local secondary school. Students of the school were encouraged to respond to six open-ended questions designed by the school on: (a) building design; (b) building bulk and height; (c) suggestions on solving the conflict between granting GFA concessions and public’s concern on building bulk and height; (d) facilities that should be granted GFA concessions; (e) capping of GFA concessions; and (f) energy efficiency installations.

- 2.4 There were 95 submissions responding to a questionnaire designed by a local university. Students (and two staff members) of that university responded to close-ended questions and open-ended questions in the questionnaire.
- 2.5 A total of 752 submissions from secondary school students was received from a photo competition organised by the Council. Students who participated in the competition were asked to describe their expectations of a sustainable built environment and views on quality building design.
- 2.6 Responses to both close-ended questions and open-ended questions for the three above-mentioned sources were included in the analyses and the associated results are presented under the respective themes of views in “**Summary of View Collected**” of **Chapter 3**.
- 2.7 These three sources of student input total 997 submissions and constitute 61.8 percent of all submissions, accounting for 34.4 percent of all text units.

## **DEVELOPMENT OF ANALYTICAL FRAMEWORK**

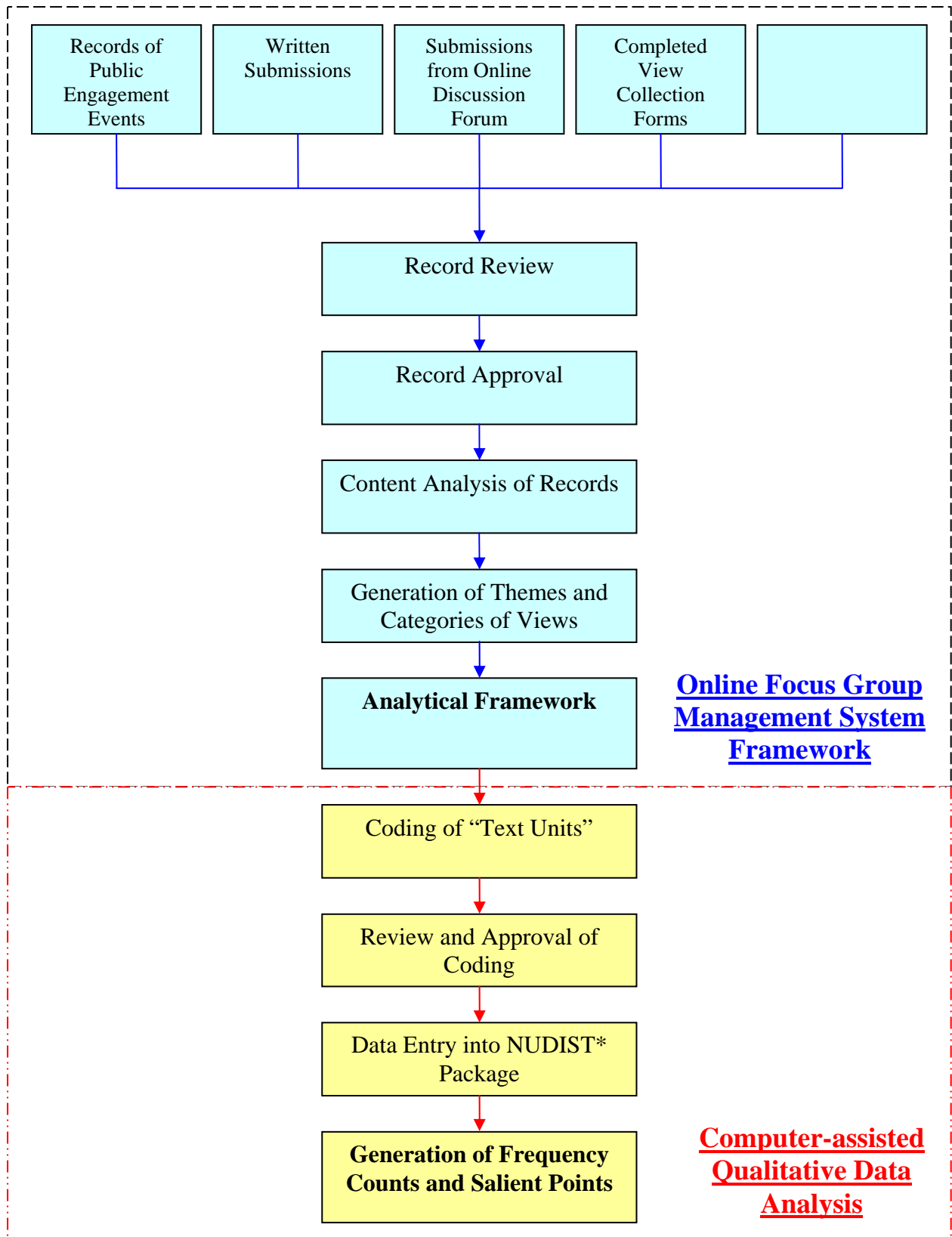
- 2.8 Data analysis follows a data-driven approach – the Grounded Theory approach – through which the analytical framework was derived from the data received. The development of the analytical framework is described below and illustrated in **Exhibit 2**.
- 2.9 All relevant materials (including voice files, PowerPoint presentations, relevant notes of engagement events, written submissions, emails, on-line discussion forum content, completed view collection forms, and relevant media reports) were uploaded to an internally developed “Online Focus Group Management System” (OFGMS) to facilitate data sharing, content reviewing, content approval and overall project management. Access to the OFGMS is password-protected and is restricted to the consultants of the PE exercise.
- 2.10 Every record of views collected was subsequently reviewed by a record reviewer, and a record approved then further reviewed the record for final approval.
- 2.11 Content analysis of the approved records was conducted by a team of consultants to extract views, which were then organised into themes, categories and sub-categories of the analytical framework.
- 2.12 The analytical framework was revised several times to ensure comprehensive coverage of all the collected views.

- 2.13 A schematic tree to depict the hierarchy and relations of different themes and categories of views is shown in **Exhibit 3**. The first 10 themes are derived from the core issues identified in the IR document. Other emerged issues are grouped under Theme 11 (Other Views Raised).

## **CODING AND DATA ANALYSIS**

- 2.14 A consultant coded each view expressed in the records based on the established themes, categories, and sub-categories. For views expressed in PE events, coding was done by a consultant who was present in the concerned event.
- 2.15 The views expressed in each record were organised into “text units” before they were coded. **A “text unit” is a phrase, a sentence or a sequence of sentences representing a point made by the respondent.**
- 2.16 The preliminary assigned code for every “text unit” was then reviewed and approved or otherwise by another consultant.
- 2.17 NUDIST (Non-numerical Unstructured Data Indexing Searching and Theorizing), a qualitative data analysis computer software, was employed to organise, analyse and summarise the coded data according to specific categories within the analytical framework.
- 2.18 Excerpts of comments representing major views on various categories and sub-categories were then displayed and “salient points” were drawn up by consultants. **A “salient point” is a statement that is representative of a group of similar “text units”.** To ensure that the salient points were representative and exhaustive, randomly selected documents were examined and the views therein were compared with those reflected by the salient points.
- 2.19 **Frequency counts of “text units”** under each theme or category/sub-category within the analytical framework were generated by NUDIST.
- 2.20 In extracting text units from the documents, the following rules were adopted:
- (a) For records of forums, views expressed by officials and forum moderators were not included; and
  - (b) For media reports, views from reports on PE events were not included, as those views are already captured in the PE forum records.

**Exhibit 2: Development of Analytical Framework and Coding Process**



\* Non-numerical Unstructured Data Indexing Searching and Theorizing – a computer software for qualitative data analysis



**Exhibit 3: Schematic Coding Tree for Data Analysis**

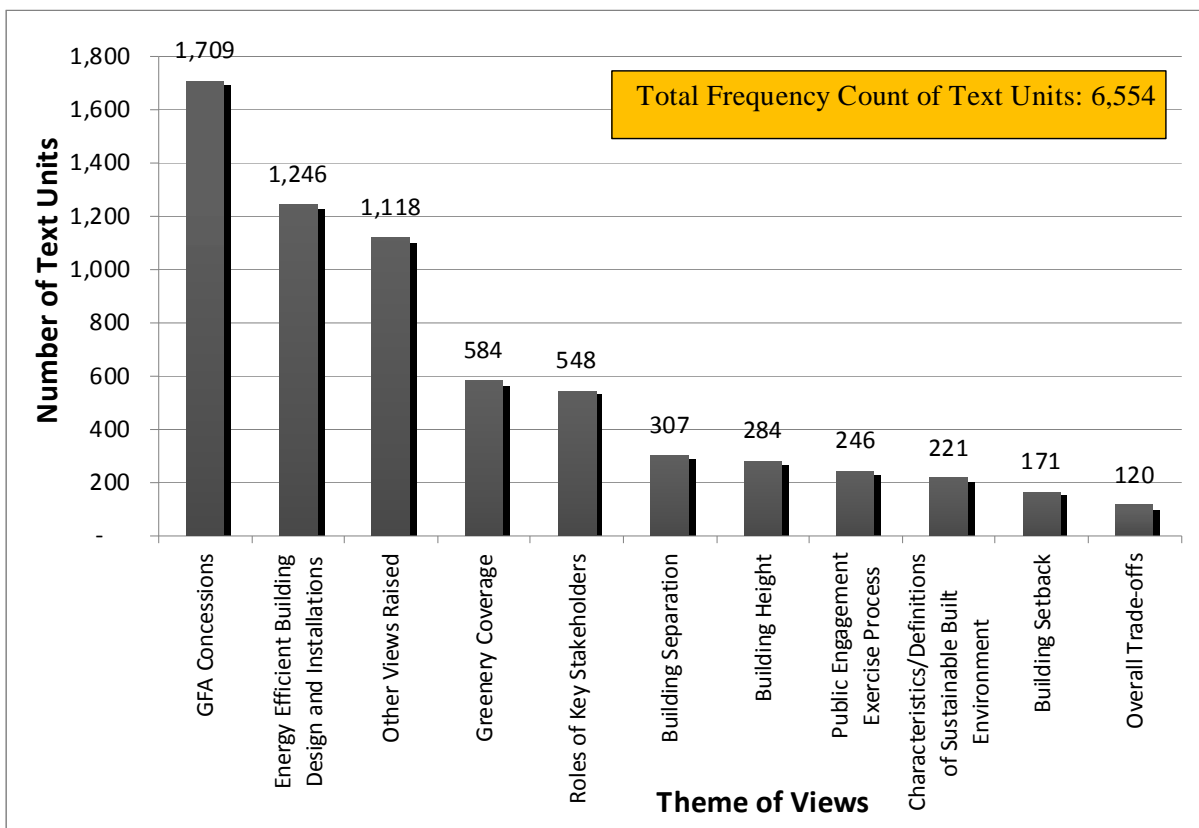
1. Characteristics/Definitions of Sustainable Built Environment	2. Building Separation	3. Building Setback	4. Greenery Coverage	5. GFA Concessions	6. Energy Efficient Building Design & Installations	7. Building Height	8. Overall Trade-offs	9. Roles of Key Stakeholders	10. Public Engagement Exercise Process	11. Other Views Raised	
1.1 Characteristics/Definitions of sustainable built environment	2.1 Support for mandatory building separation	3.1 Support for mandatory building setback	4.1 Support for mandatory greenery coverage	5.1 Overall comments on GFA	5.11 Changes to GFA concession policy	6.1 Support for mandatory energy efficient building design and installations	7.1 Support for setting limit to building height	8.1 Short-term benefits vs long-term benefits	9.1 Government's role	10.1 Comments on PE process	11.1 Building regulatory framework
	2.2 Against mandatory building separation	3.2 Against mandatory building setback	4.2 Against mandatory greenery coverage	5.2 Support for GFA concessions	5.12 Granting GFA concessions for the community	6.2 Against mandatory energy efficient building design and installations	7.2 Against setting limit to building height	8.2 Specific stakeholders' interests vs public interests	9.2 Developers' role	10.2 Follow-up actions after PE exercise	11.2 Planning and urban design
	2.3 Suggestions on building separation	3.3 Suggestions on building setback	4.3 Suggestions on greenery coverage	5.3 Against GFA concessions	5.13 Granting GFA concessions for sky garden	6.3 Suggestions on improving energy efficiency	7.3 Other opinions on building height and bulk	9.3 LegCo's Role	10.3 Other opinions on PE exercise	11.3 Air quality	
	2.4 Cost of building separation	3.4 Cost of building setback	4.4 Cost of greenery coverage	5.4 Administrative issues (e.g. transparency, accountability, etc.)	5.14 Granting GFA concessions for energy saving equipment	6.4 Cost of energy efficiency		9.4 Users' role		11.4 Public space	
	2.5 Other opinions on building separation	3.5 Other opinions on building setback	4.5 Other opinions on greenery coverage	5.5 Granting GFA concessions for amenity features	5.15 Other opinions on GFA concessions	6.5 Improvement of lighting system	9.5 Cooperation between different stakeholders			11.5 Heat island effect	
				5.6 Granting GFA concessions for essential features		6.6 Improvement of air-conditioning system				11.6 Conservation	
				5.7 Granting GFA concessions for car parks	6.7 Specific energy-saving ideas	11.7 Long-term liveability					
				5.8 Granting GFA concessions for public passage	6.8 Other opinions on energy efficiency	11.8 Emphasis on improving existing buildings					
				5.9 Granting GFA concessions for green features		11.9 Benchmarking standards					
				5.10 Capping GFA concessions		11.10 Any other opinions					

## CHAPTER 3: ANALYSIS AND SUMMARY

### THEMES AND FREQUENCIES

3.1 Based on the analytical framework, views were grouped under 11 themes and 62 categories. The 11 themes and their associated frequency counts in terms of number of text units (totalling 6,554) are shown in **Exhibit 4**. Amongst the 11 themes, the top three themes with the most text units are “GFA Concessions” (1,709 text units), “Energy Efficient Building Design and Installations” (1,246 text units), and “Other Views Raised” (1,118 text units). The number of text units from different sources and the associated average is shown in **Exhibit 5**.

**Exhibit 4: Eleven Key Themes of Views Collected (in Descending Order)**



**Exhibit 5: Number of Text Units and Average Number of Text Units by Data Source**

	Total	Breakdown						
		(1) Records of PE Events	(2) Written Submissions					(3) Media Report
		(a) Letter/ Email (including 41 organisational submissions)	(b) Photo competition	(c) A local secondary school	(d) A local university	(e) Others (e.g. Views Collection Forms, online discussion forum, etc.)		
No. of Documents	1,612	47	267	752	150	95	145	156
No. of Text Units	6,554	2,082	1,859	722	548	982	198	163
No. of Text Units per Document	4.07	44.30	6.96	0.96	3.65	10.34	1.37	1.04

**FREQUENCY COUNTS OF THE NUMBER OF TEXT UNITS**

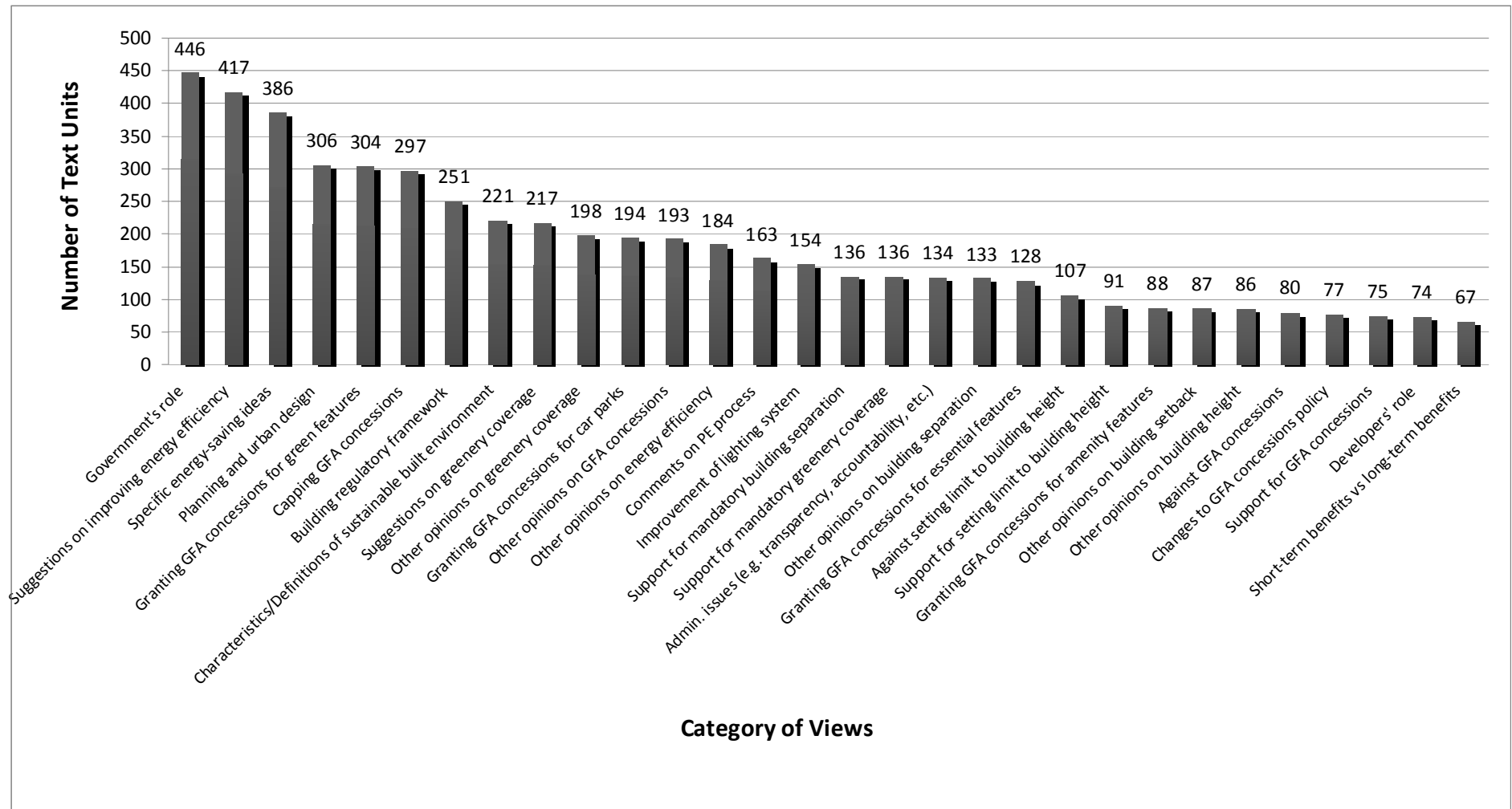
- 3.2 As shown in **Exhibit 5**, the Records of PE events generated the most number of views (2,082 text units) with an average number of text units per document was 4.07. Letters or emails, including 41 organisational submissions, generated 1,859 text units with an average number of text units per document as 6.96.
- 3.3 The frequency counts of the number of “text units” of the top 30 categories of views are shown in **Exhibit 6** and presented in a bar chart in **Exhibit 7**.

**Exhibit 6: Top 30 Categories of Views (in Descending Order)**

Item	Category No.	Description	Frequency
1	9.1	Government's role	446
2	6.3	Suggestions on improving energy efficiency	417
3	6.7	Specific energy-saving ideas	386
4	11.2	Planning and urban design	306
5	5.9	Granting GFA concessions for green features	304
6	5.10	Capping GFA concessions	297
7	11.1	Building regulatory framework	251
8	1.1	Characteristics/Definitions of sustainable built environment	221
9	4.3	Suggestions on greenery coverage	217
10	4.5	Other opinions on greenery coverage	198
11	5.7	Granting GFA concessions for car parks	194
12	5.15	Other opinions on GFA concessions	193
13	6.8	Other opinions on energy efficiency	184
14	10.1	Comments on PE process	163
15	6.5	Improvement of lighting system	154
16	2.1	Support for mandatory building separation	136
17	4.1	Support for mandatory greenery coverage	136
18	5.4	Administrative issues (e.g. transparency, accountability, etc.)	134
19	2.5	Other opinions on building separation	133
20	5.6	Granting GFA concessions for essential features	128
21	7.2	Against setting limit to building height	107
22	7.1	Support for setting limit to building height	91
23	5.5	Granting GFA concessions for amenity features	88
24	3.5	Other opinions on building setback	87
25	7.3	Other opinions on building height	86
26	5.3	Against GFA concessions	80
27	5.11	Changes to GFA concessions policy	77
28	5.2	Support for GFA concessions	75
29	9.2	Developers' role	74
30	8.1	Short-term benefits vs long-term benefits	67

**Notes:** Exhibit 6 excludes “11.10 Any other opinions” under theme 11 although it has a frequency of 353.

**Exhibit 7: Bar Chart Showing Top 30 Categories of Views (in Descending Order)**



## ANALYSIS

- 3.4 By themes, “GFA Concessions” top the frequency count in terms of the number of views received, followed by “Energy Efficient Building Design and Installations”, “Roles of Key Stakeholders”, and “Other Views Raised”.
- 3.5 The ten categories receiving the most comments are: “Government’s Role”, “Suggestions on Improving Energy Efficiency”, “Specific Energy-saving Ideas”, “Planning and Urban Design”, “Granting GFA Concessions for Green Features”, “Capping GFA Concessions”, “Building Regulatory Framework”, “Characteristics/Definitions of Sustainable Built Environment”, “Suggestions on Greenery Coverage”, and “Other Opinions on Greenery Coverage”.
- 3.6 The most frequently mentioned points of views are summarised below, with the number of text units shown in brackets where appropriate:

### **Definition of a Sustainable Built Environment (221 text units)**

- 3.7 There are many views (221) on what defines a sustainable built environment, which, taken together, are about: taking a holistic approach, and achieving a balance among environmental, social and economic issues, and maintaining harmonious interaction between humans and their environment (111); specific design details such as building separation, setback of buildings and enhancement of greening of buildings, and using technology to support energy-efficient designs and installations (29); adopting people-oriented designs, providing a healthy, safe and enjoyable environment for the building users as well as the general public (15); causing no harm to and relying on the natural environment (10); minimising overall negative impact to the community and future generations (8); being resource conscious (8); suitable spatial planning (6); giving detailed consideration to the complete building lifecycle (5); engaging the public (4); lowering development density (4); and maintaining the characteristics of the district, as well as protecting the surrounding environment and heritage sites (3).

### **Building Separation (307 text units)**

- 3.8 Majority of the responses received (136 responses for, 10 against) are in support of mandatory building separation, suggesting that legislation is necessary to ensure

compliance. Many standards have been proposed as well as a flexible approach in which standards should vary with geographical areas.

### **Building Setback (171 text units)**

- 3.9 Most of the views collected (46 for, 11 against) are in favour of mandatory requirements for building setback so as to improve pedestrian environment in narrow streets. Those against mandatory setback expressed that it would discourage developers from redeveloping old buildings, that it might not be appropriate for small sites, and that it might not result in improved air quality.
- 3.10 Comments generally favour implementing setback with proper urban design, taking into account the local environment of each area, each building and factors such as building separation, building height and bulk, greenery coverage, car parks and pedestrian environment.

### **Greenery Coverage (584 text units)**

- 3.11 Most of the views collected (136 support, 10 against) are in favour of mandatory requirements on greenery coverage.
- 3.12 Many suggestions (217) were made on greenery coverage, including comments on green roof (113), sky gardens (37), vertical greenery (30), and greenery ratio (27).

### **GFA Concessions (1,709 text units)**

#### **GFA Concessions in General**

- 3.13 Forming a relatively small part of all the views concerning GFA concessions, the views on GFA concessions as an incentive for different building features show no consensus on this issue (75 support, 80 against). Responses in favour see the concessions as promoting desirable and essential features and innovation, and that they can provide genuine benefits to the community. There are concerns that a more stringent GFA policy would result in lack of flexibility, underprovision of desirable features and facilities and increased flat prices. Those against see concessions as unnecessary and resulting in bulkier buildings. There are suggestions that essential and green features should be mandated. There are perceptions of transfer of benefit to developers through GFA concessions.

- 3.14 On the other hand, the majority of responses concerning GFA concessions are made on specific concessions: green features (304), car parks (194), essential features (128), amenity features (88), and public passages (56). Views fall into two types: essential features (65 for, 42 against) and public passages (32 for, 9 against) receive more support than opposition; while the reverse is the case for amenity features (15 for, 49 against), car parks (23 for, 80 against) and green features (92 for, 113 against). Reasons for supporting specific concessions include their essential nature and social and environmental benefits; reasons against include abuse by and benefit to developers, and the need to review scope and standards (car parks). There are suggestions to build car parks underground to avoid the bulky building effect, but concerns are also expressed that this would increase energy consumption. There are also concerns that the end-users and developers benefit from certain features at the expense of the community.

### **Capping GFA Concessions**

- 3.15 Most support (220 support, 49 against) capping GFA concessions to avoid bulky buildings. Of these supporting views, the majority are for an overall cap. Those oppose fear that capping would discourage innovations and the adoption of environmental-friendly features.

### **Transparency and Accountability**

- 3.16 Many (134) call for the system to be improved through more transparency and accountability. Concerns are expressed on the discretionary powers of the Director of Buildings, and suggestions are made to enhance monitoring measures to oversee the granting of concessions.

## **Energy Efficient Building Design and Installations (1,246 text units)**

### **Mandatory Requirements**

- 3.17 There is predominant support for mandatory requirements on energy efficiency in buildings (41 support, one against).



### **Energy Efficiency and Renewable Energy**

- 3.18 There are many responses (417) on improving energy efficiency, especially on the use of renewable energy (205), including advocating the two electricity companies to use wind turbines and solar power more extensively, and to actively participate in energy efficiency projects amongst building users.

### **Energy Savings**

- 3.19 Many suggest energy saving measures for decorative and public lighting (154) and air-conditioning (47).
- 3.20 Many (386) suggest a variety of other energy-saving ideas, including the use of eco-friendly building materials (104), better heat insulation (73), recycling of waste (44), energy efficient construction methods (35) and other improvements in use of natural lighting, natural ventilation, and new technologies.

### **Subsidies/Financial Support**

- 3.21 Some (51) suggest that Government should provide subsidies and financial support for energy efficient building design and installations.

### **Education**

- 3.22 Many (73) support educating the public on energy saving and sustainable development and thereby changing habits and culture.

### **Building Height (284 text units)**

- 3.23 Opinions are somewhat divided (91 for, 107 against) over whether or not Government should limit building heights. There are suggestions that they should be set either in absolute terms – e.g. 20 to 40 storeys – or more flexibly, with reference to coastal or other sites, with layering of those nearer the coast. Those in favour see height limits as facilitating better ventilation and protecting the ridgeline. Those against are concerned about its impact on the supply of flats and its effectiveness in improving air ventilation in the area.

## **Overall Trade-offs (120 text units)**

### **Short Term Benefits vs Long Term Benefits**

- 3.24 Many responses (67) recognise the long-term social and economic benefits of sustainable development as well as the short-term costs (including loss of Government revenue) and the unwillingness of end-users to meet these costs.

### **Specific Stakeholders' Interests vs Public Interests**

- 3.25 Many (53) discuss the need to achieve a balance between specific stakeholders' interests and public interests.

## **Roles of Key Stakeholders (548 text units)**

### **Government's Role**

- 3.26 Many (446) responses focus on Government's role. The prevailing view is that Government should be more responsive to problems (78), provide more incentives and enforce penalties to encourage sustainable features (63), take the lead on sustainable development (51), and setting good examples in publicly funded buildings (12).
- 3.27 There is concern (25) that Government should improve the coordination and efficiency of different government departments in implementation. Some also express concerns about Government's lack of impartiality (26), accountability and transparency (39).

### **Developers' Role**

- 3.28 Many (74) discussed the role of developers: comments range from wanting developers to do more to develop a sustainable built environment to the view that developers are simply operating within the law and responding to market demands.

## **Public Engagement Exercise Process (246 text units)**

### **The PE Process**

- 3.29 Some (15) welcome Government's efforts to engage the public and other stakeholders on what is recognized as a very complicated but important issue. A few (3) have reservations that the consultation will solicit uneducated answers, or may not be able to balance properly the different views expressed.

### **The Invitation for Response (IR) Document**

- 3.30 Many comments on the IR document are polarised (118) – some find it too technical and specialised; while others find it over-simplified on the complicated issues; some find it over-focused on new buildings only. Some comment that Government should not ignore responses outside the scope of the IR document received through the consultation exercise. A few (3), however, find that the IR document provides valuable information for the general public.

### **Education and Action**

- 3.31 Some (22) emphasise the importance of educating the public on sustainable development. Some (17) are eager to see Government departments taking actions to implement the results of the exercise.

## **Other Views Raised (1,118 text units)**

### **Review the Building Regulatory Framework**

- 3.32 Some (81) perceive the Buildings Ordinance as outdated. Some (114) urge Government to carry out regular reviews of the ordinance and other relevant regulations, practice notes, etc.

### **Holistic Approach to Urban Design**

- 3.33 Many (155) support a holistic approach to urban design. This would include, for instance, considering broader social issues of town planning, mobility, regeneration

of old areas, economic return, benefits to the community, considering building development proposals in the context of the neighbourhood and district based policies. It should involve the public. Three-dimensional planning should also be used.

## **SUMMARY**

- 3.34 There is general support for achieving a quality and sustainable built environment through building separation, building setback, greenery coverage, and energy efficiency. There is general concern over building height and bulk.
- 3.35 There are different views on GFA concessions as an incentive for different building features, with more supporting concessions being granted for essential features and public passages and more against concessions for amenity features, car parks and green features. Most support capping GFA concessions. Among those in favour of capping GFA concessions, there is predominant support for an overall cap.
- 3.36 There is a general support for a holistic approach to regulating building development which take into account the long-term needs of the community and of the local environment. There should not be a one-size-fits-all approach.
- 3.37 In terms of the regulatory framework, there is general support that Government should undertake a review of the tools -- e.g. Outline Zoning Plans, plot ratio and lease conditions, regulatory framework for buildings and GFA concessions -- to ensure they all work together to meet the objectives of developing a quality and sustainable building environment.

## CHAPTER 4: SUMMARY OF VIEWS COLLECTED

### SUMMARY OF VIEWS COLLECTED

- 4.1 A summary of all the views collected is shown the following sections. Each section covers one theme, and is headed by a table showing the categories and sub-categories (if any) of views covered by the theme, and a pie chart showing the distribution of views. Each theme contains a number of categories and sub-categories. The code number for each theme, categories, and sub-categories and their associated number of text units are shown in brackets. Frequency counts of views are expressed in terms of number of “text units” – a sentence or a group of sentences expressing a particular point – and are shown inside brackets where appropriate. The section then presents a summary of the responses received in the form of a list of “salient points”. A salient point is a statement that is representative of a group of similar text units.
- 4.2 The following sections show the summaries of views of the following themes:
- (a) Theme 1: Characteristics/Definitions of sustainable built environment;
  - (b) Theme 2: Building separation;
  - (c) Theme 3: Building setback;
  - (d) Theme 4: Greenery coverage;
  - (e) Theme 5: Gross floor area (GFA) concessions;
  - (f) Theme 6: Energy efficient building design and installations;
  - (g) Theme 7 Building height;
  - (h) Theme 8: Overall trade-offs;
  - (i) Theme 9: Roles of key stakeholders;
  - (j) Theme 10: Public engagement exercise process; and
  - (k) Theme 11: Other views raised.

## **THEME 1: CHARACTERISTICS/DEFINITIONS OF SUSTAINABLE BUILT ENVIRONMENT**

### **Categories of Views:**

Characteristics/Definitions of Sustainable Built Environment (Code no.: 1.1, 221 text units)

Holistic Approach, Harmony and Balance (Code no.: 1.1.1, 111 text units)

Compliance with Building Guidelines and Energy Standards (Code no.: 1.1.2, 29 text units)

People-orientation (Code no.: 1.1.3, 15 text units)

The Natural Environment (Code no.: 1.1.4, 10 text units)

Future Needs (Code no.: 1.1.5, 8 text units)

Resource Conscious (Code no.: 1.1.6, 8 units)

Suitable Spatial Planning (Code no.: 1.1.7, 6 text units)

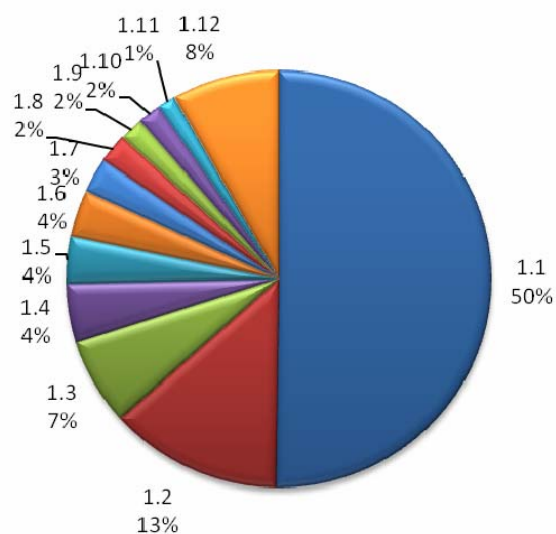
Whole Building Lifecycle Approach (Code no.1.1.8, 5 text units)

Public Engagement in Policy Formation (Code no. 1.1.9, 4 text units)

Lower Density (Code no.: 1.1.10, 4 text units)

Conservation (Code no.: 1.1.11, 3 text units)

Others (Code no.: 1.1.12, 18 text units)



## **SALIENT POINTS ON THEME 1: CHARACTERISTICS/DEFINITIONS OF SUSTAINABLE BUILT ENVIRONMENT (221 TEXT UNITS)**

### **CHARACTERISTICS/DEFINITIONS OF SUSTAINABLE BUILT ENVIRONMENT (CODE NO.: 1.1, 221 TEXT UNITS)**

4.3 The following characteristics or definitions of sustainable built environment have been suggested:

#### ***Holistic Approach, Harmony and Balance (Code no.: 1.1.1, 111 text units)***

4.4 A holistic approach, taking into consideration interactions between people and the environment, incorporating different architectural styles in a harmonious way, and balancing among environmental, social, metropolis, economic, financial, transportation issues and different parties.

#### ***Compliance with Building Guidelines and Energy Standards (Code no.: 1.1.2, 29 text units)***

4.5 Separation of buildings, setback of buildings, building height restrictions, enhancement of greening of buildings, environmental-friendly building materials, optimal use of space, energy-efficient designs, greenery coverage, natural lighting, sun shades, photovoltaic panels, natural ventilations, recycled building and decoration materials, energy saving electrical and mechanical installations.

#### ***People-orientation (Code no.: 1.1.3, 15 text units)***

4.6 Healthy, safe, enjoyable and comfortable living environment, more space with aesthetic appeal, satisfying the needs of residents, adopting people-oriented design (both indoors and outdoors).

***The Natural Environment (Code no.: 1.1.4, 10 text units)***

- 4.7 Nurturing a sense of belonging to the natural environment; no harm to the natural environment, relying on natural wind and sunlight in building design; providing sufficient green environment surrounding residential areas.

***Future Needs (Code no.: 1.1.5, 8 text units)***

- 4.8 Have considerations for the future needs of residents and future generations.

***Resource Conscious (Code no.: 1.1.6, 8 units)***

- 4.9 Using the least resources principle to produce the highest post-construction performance outcomes, without having to sacrifice on design but cheaper to maintain and manage in the long-term.

***Suitable Spatial Planning (Code no.: 1.1.7, 6 text units)***

- 4.10 Suitable spatial planning; provision of open space and greenery.

***Whole Building Lifecycle Approach (Code no.1.1.8, 5 text units)***

- 4.11 Adopting the whole building lifecycle from project planning, design, procurement, construction, operation to maintenance, and cost-effectiveness on construction and maintenance of the building.

***Public Engagement in Policy Formation (Code no. 1.1.9, 4 text units)***

- 4.12 Dealing with a wider development framework at policy level, with public engagement and user monitoring mechanism to regulate and monitor the quality and expenditure of sustainable development.



***Lower Density (Code no.: 1.1.10, 4 text units)***

- 4.13 Reducing unnecessary new projects; lowering development density, more greenery and ventilation corridor through land resumption.

***Conservation (Code no.: 1.1.11, 3 text units)***

- 4.14 Maintaining the characteristics of the district, and protecting the surrounding environment and heritage sites.

***Others (Code no.: 1.1.12, 18 text units)***

- 4.15 Choice and flexibility, features encompassing health, passive design, lifecycle application, building construction, technology advancement and knowledge dissemination.

## THEME 2: BUILDING SEPARATION

### Categories of Views:

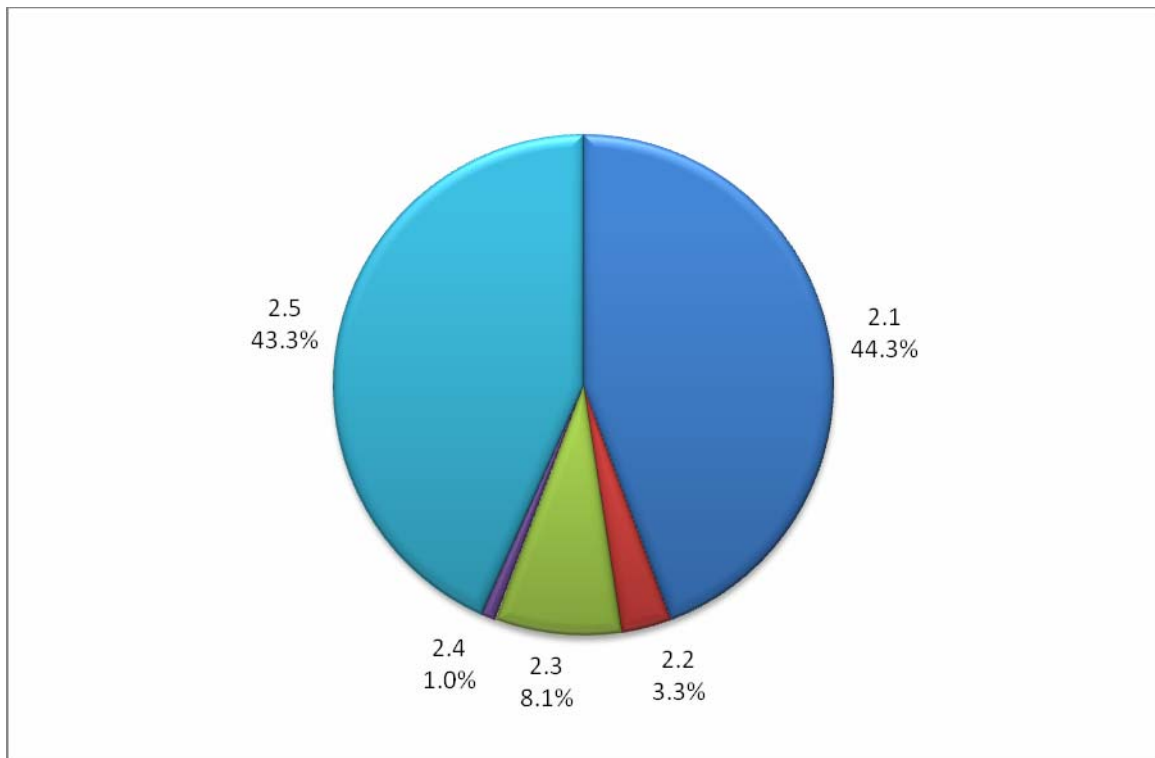
Support for Mandatory Building Separation (Code no.: 2.1, 136 text units)

Against Mandatory Building Separation (Code no.: 2.2, 10 text units)

Suggestions on Building Separation (Code no.: 2.3, 25 text units)

Costs of Building Separation (Code no.: 2.4, 3 text units)

Other Opinions on Building Separation (Code no.: 2.5, 133 text units)



## **SALIENT POINTS ON THEME 2: BUILDING SEPARATION (307 TEXT UNITS)**

### **SUPPORT FOR MANDATORY BUILDING SEPARATION (CODE NO.: 2.1, 136 TEXT UNITS)**

- 4.16 Building separation should be mandatory to ensure airflow.
- 4.17 Legislation on building separation would be the most effective measure.
- 4.18 A minimum standard on building separation should be imposed when land is sold.
- 4.19 Suggested building separation guidelines include the following:
- (a) For construction site that is wider than 40 metres, each side of the site should leave 10% space for public use;
  - (b) If buildings of a construction site form a continuous width of more than 60 metres, building separation should be mandatory;
  - (c) Mandatory separation of 15 metres between buildings, with the width of separation increasing with building height;
  - (d) For site areas greater than 0.5 hectares or with a continuous building footage of over 40 metres, there should be a mandatory separation;
  - (e) For site areas greater than one hectare or with a continuous building footage of over 25 metres, there should be a mandatory separation equivalent to 10% to 30% of the total frontage area of the buildings;
  - (f) For site areas greater than two hectares or with continuous building width of over 60 metres, a separation equivalent to 20% to 33.3% of the total frontage area of the buildings should be required;
  - (g) For site areas with a continuous building footage of over 60 metres, there should be a mandatory separation equivalent to 30% to 50% of the total frontage area of the buildings or a mandatory separation of not less than 10 metres;
  - (h) For site areas greater than two hectares, a separation should be introduced;
  - (i) For buildings lower than 120 metres in height, building separation should be at least 15 metres; for buildings with 121-150 metres in height, building

separation should be at least 20 metres; for buildings with 151-200 metres in height, building separation should be at least 30 metres; and for buildings with 200 metres or above in height, building separation should be at least 40 metres; and

(j) More stringent requirements on building separation should be imposed on building developments along the seafront and the river bank.

4.20 An appropriate separation between buildings could enhance the image of Hong Kong and attract more investments, allow more space for greenery, enable the passage of sunlight, and improve air ventilation.

4.21 Together with building separation, a mandatory space or passage should be in place for every few floors of a flat.

4.22 Separation should be applied according to the different characteristics of different districts. For example, requirements for hillside regions and those for coastal regions should be different.

4.23 Making appropriate building separation will provide adequate buffer distance between building blocks to ensure the visual and air permeability.

#### **AGAINST MANDATORY BUILDING SEPARATION (CODE NO.: 2.2, 10 TEXT UNITS)**

4.24 Building separation should not be mandatory, as that would create monopoly in the streetscape.

4.25 There is enough legislation governing mandatory building separation.

4.26 Mandatory building separation may not necessarily eliminate “walled” effect.

4.27 As proven by some scientific studies, building separation may not have substantial impact on air flow.

4.28 Instead of mandatorily separating buildings, a wind corridor should be in place.

4.29 Mandatory building separation may not work in a place with scarce land but a dense population like Hong Kong. It would directly affect the supply of housing and lead to the rise in housing price.

## **SUGGESTIONS ON BUILDING SEPARATION (CODE NO.: 2.3, 25 TEXT UNITS)**

- 4.30 Government should set clear guidelines on building separation.
- 4.31 Building separation should be looked upon with a holistic approach, by considering the surrounding environment (not just individual buildings).
- 4.32 Legislating related measures are supported in order to improve sustainable building design. However, these regulations should be simple, systematic, easy to execute, and flexible, after balancing interests of the stakeholders.
- 4.33 In review of different geographical features (e.g. ridgeline, coastline, wind direction, ventilation, etc.) and land use conditions (e.g. site density, road environment), different areas might have different requirements for separation.
- 4.34 Separation standards should vary, depending on the specific use for the commercial and residential districts.
- 4.35 In older districts, if building is restricted (in building separation), it would stifle redevelopment potential.
- 4.36 If a building does not block air flow, there should be some flexibility in the implementation of separation.
- 4.37 The amount of separation between buildings should be positively proportional to the heights of buildings.
- 4.38 Should building separation be made mandatory, intervening space equivalent to a percentage of the total frontage area of the building (s) is advisable to be taken as measuring unit.

## **COSTS OF BUILDING SEPARATION (CODE NO.: 2.4, 3 TEXT UNITS)**

- 4.39 Building separation is desirable but it involves costs which should also be considered.

**OTHER OPINIONS ON BUILDING SEPARATION (CODE NO.: 2.5, 133  
TEXT UNITS)**

- 4.40 Building separation would not seriously affect the scale of construction projects and development potential.
- 4.41 Building separation should be tailored made for the specific sites. Each site would have its own characteristics.
- 4.42 The Government should adopt district planning to solve the problem of building separation. First, a climate map for different districts and air ventilation corridors should be established. Second, use a scientific approach to calculate air flow for different districts.
- 4.43 Building separation guidelines cannot be applied to the built-up areas as the sites are generally too small. These need to be applied by the Planning Department to the layout of a whole district, using the public roads and open space to provide the necessary separation rather than relying on the private lot owners.
- 4.44 For every 10 to 15 floors, there must be 20-30% openings or ventilation features between buildings to allow free passage of air flow, and the effective air flow “velocity” downstream behind the building block or the estate site must be no less than 30% of upstream.
- 4.45 Building separation should be as wide as possible to allow sun coverage and air ventilation.
- 4.46 It is useful to consider the 3 dimensions when designing building separations.
- 4.47 The amount of separation between buildings should be calculated by timing height of the buildings with a certain ratio of separation.
- 4.48 In view that polluted air would diffuse better and quicker, short buildings close to one another would be preferred to tall buildings being far from one another.
- 4.49 While low-rise buildings could help to enhance pedestrian wind comfort, a balanced combination of high-rise and low-rise buildings should be used to improve ventilation hence alleviating health problems.
- 4.50 The Government should conduct detailed studies and research to determine the relationship between building height, building bulk and building separation. Then, the Government should devise reference guidelines for the professionals.
- 4.51 Areas created by building separation should be used for public recreation.

- 4.52 The minimum gaps between buildings specified in the IR document are too small to achieve any major goals.
- 4.53 Instead of addressing the issue of building separation, urban heat island effect and gradual warming of Hong Kong are the fundamental issues that should be addressed.
- 4.54 Rather than relying mainly on improved space between buildings, the most effective way is to control vehicle emissions by setting emissions standards on the vehicles themselves.

### **THEME 3: BUILDING SETBACK**

#### **Categories of Views:**

Support for Mandatory Building Setback (Code no.: 3.1, 46 text units)

Against Mandatory Building Setback (Code no.: 3.2, 11 text units)

Suggestions on Building Setback (Code no.: 3.3, 24 text units)

Costs of Building Setback (Code no.: 3.4, 3 text units)

Other Opinions on Building Setback (Code no.: 3.5, 87 text units)

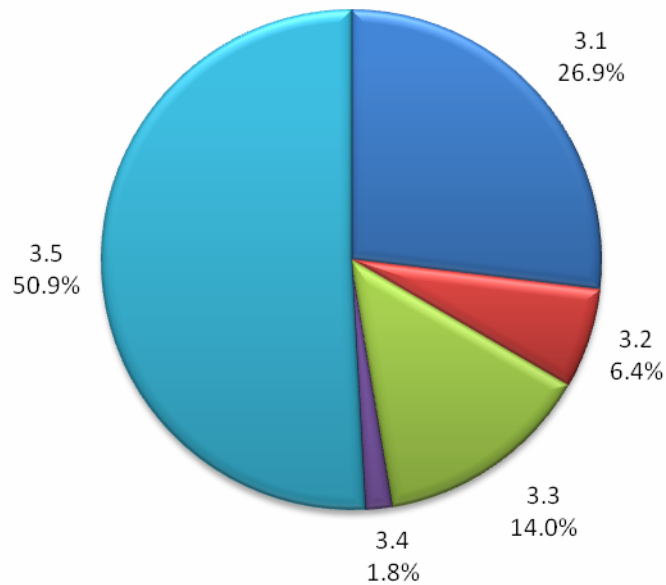
    Building Setback and Canyon Effect (Code no.: 3.5.1, 4 text units)

    Building Setback and Narrow Streets (Code no.: 3.5.2, 4 text units)

    Level of Building Setback (Code no.: 3.5.3, 10 text units)

    Feasibility of Building Setback in Urban Areas (Code no.: 3.5.4, 11 text units)

    Any Other Opinions on Building Setback (Code no.: 3.5.5, 58 text units)





## **SALIENT POINTS ON THEME 3: BUILDING SETBACK (171 TEXT UNITS)**

### **SUPPORT FOR MANDATORY BUILDING SETBACK (CODE NO.: 3.1, 46 TEXT UNITS)**

- 4.55 There should be mandatory requirements for building setback. However, these regulations should be simple, systematic, easy to execute, and flexible, after balancing interests of the stakeholders.
- 4.56 Fully support building setback with 15 metres apart between buildings.
- 4.57 Building setback would improve the pedestrian environment and space, and facilitate separation between buildings.
- 4.58 Building setback should be imposed for buildings adjacent to narrow streets in urban area.
- 4.59 The principle of building frontage setback at the street level is supported.
- 4.60 The Government should impose setback requirement for podium structures.
- 4.61 A minimum width of 2.5m should be adopted as mandatory building setback.
- 4.62 For streets less than 15 metres wide, new building developments measured from ground level to a height of 20 metres should be set back to provide a space with width of not less than 8 metres measured from the centre line of the street (i.e. 7 metres for road width, 2.5 metres for planning zone on both sides, and 2 metres for footpath on both sides).
- 4.63 For streets less than 16 metres wide, new building developments measured from ground level to a height of 20 metres should be set back to provide a space with width of not less than 8 metres measure from the centre line of the street (i.e. 7 metres for road width, 2.5 metres for planting zone on both sides and 2 metres for footpath on both side).
- 4.64 At junctions, minimum setback at ground floor should be greater than 10 metres.
- 4.65 There should be a mandatory setback of at least 5 metres for all renewal projects in urban areas.

**AGAINST MANDATORY BUILDING SETBACK (CODE NO.: 3.2, 11 TEXT UNITS)**

- 4.66 Building setback should not be mandatory, as building setback would be impossible for some districts. Thus, building setback should vary with site areas but not made mandatory.
- 4.67 Building setback should be encouraged by granting GFA concessions instead of legislation.
- 4.68 Mandatory building setback would deter property developers from renewing old buildings, thus affecting the redevelopment process of old districts.
- 4.69 Instead of legislating on building setback, the Government can simply resume a piece of land and pay the owner.
- 4.70 The setback of buildings abutting narrow streets and in busy pedestrian areas is supported as long as the existing incentive system of bonus GFA is applied.
- 4.71 Mandatory building setback for new buildings would make them incongruent with their surroundings.
- 4.72 Building separation and installation of green or energy-efficient facilities would exert a greater effect than building setback.
- 4.73 Mandatory building setback would make the concerned buildings even nearer to one another.
- 4.74 Mandatory building setback at 15 metres above the ground may only improve the pedestrian environment but cannot improve air quality.
- 4.75 Streetscape would not benefit from having setback.

**SUGGESTIONS ON BUILDING SETBACK (CODE NO.: 3.3, 24 TEXT UNITS)**

- 4.76 Building setback should be considered with building separation, building height and bulk, greenery, car parks and pedestrian environment as a whole, rather than separately.
- 4.77 Areas gained from setback at the floor level should only be for public use, greenery, or recreational purposes.

- 4.78 Setbacks and street widening are only effective if the prevailing wind direction is taken into consideration.
- 4.79 Building design should be assisted by wind tunnel studies before setback is determined.
- 4.80 The effects of building setback should be accompanied by proper urban design in particular for areas with active street life which is one of the major characteristics of Hong Kong.
- 4.81 Building setback should only be imposed on selected streets.
- 4.82 Developers should be provided with incentives to promote building setback.
- 4.83 Small developers are generally less able to afford building setback if the land site is small. Hence building design flexibility should be provided for in order to avoid any potential unfair competition between small and large property developers.
- 4.84 Building setback should vary with district, the width of streets, prevailing wind direction, and building height.
- 4.85 Different districts have different needs for building setback. Population density should be considered when applying setback.
- 4.86 A reduction of podium coverage to say 70% to 80% will greatly improve the ground level permeability and allow space for greenery.
- 4.87 Whenever the 100% site coverage for a podium up to 15 metres is relaxed by Building Authority to 20 metres for reasons such as provision of public transport terminus, etc., the Building Authority should consider imposing a setback requirement.

#### **COSTS OF BUILDING SETBACK (CODE NO.: 3.4, 3 TEXT UNITS)**

- 4.88 Setback may reduce the size of commercial shops at ground level and thus their revenue.
- 4.89 Although setback would reduce the number of flats or shops at lower ground levels, it would widen pedestrian passages, and increase pedestrian flow, thus offsetting the economic loss.
- 4.90 Setback would increase building costs but the effectiveness is unsatisfactory.

## **OTHER OPINIONS ON BUILDING SETBACK (CODE NO.: 3.5, 87 TEXT UNITS)**

### ***Building Setback and Canyon Effect (Code no.: 3.5.1, 4 text units)***

- 4.91 “Canyon effect” caused by closely packed high-rise buildings and bulky buildings in close proximity to one another will create traffic and pedestrian congestion, block views and natural air flow and limit space for community interactions.
- 4.92 Setback can solve the “canyon effect”.

### ***Building Setback and Narrow Streets (Code no.: 3.5.2, 4 text units)***

- 4.93 Narrow streets in some districts with strong local characters deserve preservation.
- 4.94 Narrow streets associated with old mixed-use neighbourhoods embody some of the most characteristic and vibrant urban places.

### ***Level of Building Setback (Code no.: 3.5.3, 10 text units)***

- 4.95 Setback of the whole building is preferred to setback at the street level in terms of providing a quality environment.
- 4.96 For setback at higher levels, ventilation and natural lighting at street level may be improved.
- 4.97 Setback may only be applied to the first few floors to create traditional colonnade features.
- 4.98 It is suggested to permit 100% site coverage in shopping streets and similar areas but not necessarily to 15 metres in height.

### ***Feasibility of Building Setback in Urban Areas (Code no.: 3.5.4, 11 text units)***

- 4.99 Setback is feasible in new towns but may not be feasible in crowded urban areas.
- 4.100 Setback may only be feasible for large construction sites but not for sites with small plot size.

- 4.101 It is necessary to merge sites in old districts in order to create enough space for implementing proposed measures such as setback and greenery.
- 4.102 Setback for small sites in urban areas needs to be assessed and monitored.
- 4.103 For small site developments, setback would significantly jeopardise the integrity of development.
- 4.104 For old urban areas, building setback from individual developments may not be efficient in improving air ventilation. It may take a very long time to achieve the desired results.
- 4.105 Setback in existing buildings would lead to removal of residents from the existing buildings and extensive demolition works, resulting in unnecessary confrontation.

***Any Other Opinions on Building Setback (Code no.: 3.5.5, 58 text units)***

- 4.106 The definition of building setback should be clearer and it should be considered in the urban renewal or redevelopment perspectives to allow sustainable “performance”. It should not be applied just on a defined “ultimate” outcome (e.g. ideal image of the city).
- 4.107 Building setback for the redeveloped Hyatt Hotel at Nathan Road demonstrates an excellent use of GFA concessions.
- 4.108 Setback should be more towards “2-D” or even “3-D” consideration.
- 4.109 To compensate the developers for building setback, the Government may consider granting extra building height or GFA, or relaxing building bulk.
- 4.110 While it would be beneficial to have building setback, it would likely increase the height of the building.
- 4.111 There is a need to take into account of the use of the space caused by setback and the maintenance of that space.
- 4.112 Merit of street level setback depends on context and not to be indiscriminately applied.
- 4.113 The principles of protection of private rights of land ownership and of compensation for any loss of those rights are of paramount importance.

- 4.114 The 100% podium coverage below 15m in height should definitely be reviewed in a comprehensive manner. A reduction of podium coverage to say 70% to 80% will greatly improve our ground level permeability and allow space for greenery.
- 4.115 Developers often propose to dedicate areas not so much to meet public passage need, but to create patronage to their buildings, and very often such areas are not set back at street level, contrary to the intention and condition of the regulation.

## THEME 4: GREENERY COVERAGE

### Categories of Views:

Support for Mandatory Greenery Coverage (Code no.: 4.1, 136 text units)

Against Mandatory Greenery Coverage (Code no.: 4.2, 10 text units)

Suggestions on Greenery Coverage (Code no.: 4.3, 217 text units)

Greenery Ratio (Code no.: 4.3.1, 27 text units)

Reserve Space for Greenery (Code no.: 4.3.2, 10 text units)

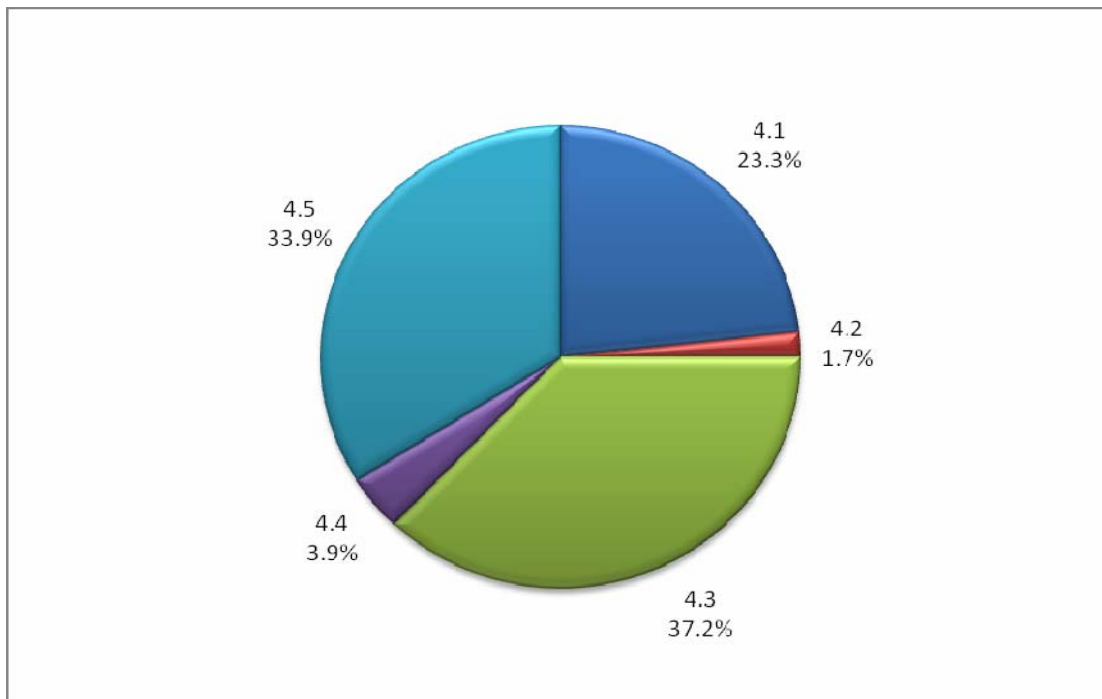
Vertical Greenery (Code no.: 4.3.3, 30 text units)

Green Roof (Code no.: 4.3.4, 113 text units)

Sky Garden (Code no.: 4.3.5, 37 text units)

Costs of Greenery Coverage (Code no.: 4.4, 23 text units)

Other Opinions on Greenery Coverage (Code no.: 4.5, 198 text units)



## **SALIENT POINTS ON THEME 4: GREENERY COVERAGE (584 TEXT UNITS)**

### **SUPPORT FOR MANDATORY GREENERY COVERAGE (CODE NO.: 4.1, 136 TEXT UNITS)**

- 4.116 There should be mandatory requirements for site coverage of greenery.
- 4.117 Mandatory coverage requirement is the best way to achieve better landscaping greenery.
- 4.118 A range of ratios (from 20% to 50%) of mandatory greenery coverage (at various parts of a building or site, including ground floor, podium, roof floor) has been proposed.
- 4.119 Greenery can provide space for relieving heavy work pressure and therefore it should be a mandatory item to be enforced by the Government.
- 4.120 The provision of green features like roof gardens and sky gardens should be the responsibility of developers.
- 4.121 Greenery features (namely: communal sky garden, communal podium garden, noise barriers) should be made mandatory for new building developments.
- 4.122 For the greening policy, it is suggested that Government should implement a ratio of mandatory greening for different kinds of developments in terms of their occupants, usage, plot ratio and development scale. The ratio should be well balanced to maximise greening opportunities in order to improve the quality of our living environment at an affordable capital cost.

### **AGAINST MANDATORY GREENERY COVERAGE (CODE NO.: 4.2, 10 TEXT UNITS)**

- 4.123 Greenery should be encouraged by certification instead of stiff legislation. It may not be necessary to establish additional legislative control in greenery requirements.
- 4.124 20-30% of greenery for buildings is supported but it should not be made compulsory.



- 4.125 The community must be willing to pay for what they want. Existing building developments do not include environmental costs.
- 4.126 Greenery coverage should start on a voluntary basis, then reinforced with economic incentives (including GFA concessions, etc.), before gradually scaling down the incentive terms and progressively turning it into a mandatory requirement if necessary.

### **SUGGESTIONS ON GREENERY COVERAGE (CODE NO.: 4.3, 217 TEXT UNITS)**

#### ***Greenery Ratio (Code no.: 4.3.1, 27 text units)***

- 4.127 When planning greenery coverage, the Government can make reference to mandatory requirements imposed by other governments (e.g. in Singapore, 30%-40% mandatory greenery; in China, about 30% mandatory greenery, etc.).
- 4.128 The recommended coverage of greenery should be between 20% and 30%, in terms of green roof, wall, or podium.
- 4.129 At ground level, 20% of the site area should be dedicated for greenery purpose as it would benefit the residents as well as the public.
- 4.130 20% to 30% as the greenery ratio for buildings is considered by environmental and architectural experts as feasible in Hong Kong.
- 4.131 Having 20% to 30% of greenery coverage may not be feasible in small sites although greenery could reduce heat island effect.
- 4.132 The proposed 20 to 30% of site areas for planting for site larger than 1,000 square metres is supported in principle.

#### ***Reserve Space for Greenery (Code no.: 4.3.2, 10 text units)***

- 4.133 Greenery belts should be reserved during the design stage.
- 4.134 Some space inside buildings could be further developed for greenery purposes.
- 4.135 Whenever roads are built in connection with a development project, the need to reserve space for plants, trees and grass should be borne in mind by developers.

***Vertical Greenery (Code no.: 4.3.3, 30 text units)***

- 4.136 Greenery on the external walls and on the roof increases the energy efficiency of buildings.
- 4.137 Planting vegetation on bridges or buildings can mitigate some of our environmental problems.
- 4.138 As Hong Kong buildings are mostly of high-rise type, horizontal and vertical greenery can effectively reduce the 'heat island' effect.

***Green Roof (Code no.: 4.3.4, 113 text units)***

- 4.139 The most important environmental protection measure is using green roofs to absorb heat, hence reducing the need for air-conditioning.
- 4.140 A specified quota of the roof area should be covered with green planting.
- 4.141 The plants at the roof top not only beautify the environment, but also absorb carbon dioxide and filter dust particles, hence producing more fresh air.
- 4.142 Having green roof can actually reduce heat absorption and beautify the appearance of the building.
- 4.143 Green roof should be enforced on a mandatory basis.
- 4.144 Rooftop greening should be promoted and it is the easiest achievable measure currently.
- 4.145 Roof garden is a shortcut to greenery.
- 4.146 Green roof should be optional.

***Sky Garden (Code no.: 4.3.5, 37 text units)***

- 4.147 Sky gardens should be provided with greenery coverage, equipped with solar energy panels.
- 4.148 Sky gardens represent an important amenity in the Hong Kong climate and can add to energy efficiency.

- 4.149 Building Regulations should cover well-designed, large-sized sky gardens in high rise buildings, so as to allow increased air circulation and air flow through the building and surrounding areas.
- 4.150 There should be monetary incentives to encourage the building of sky gardens as a first step.

#### **COSTS OF GREENERY COVERAGE (CODE NO.: 4.4, 23 TEXT UNITS)**

- 4.151 Depending on the locations of greenery in a building site, the additional capital cost for greenery in some locations (such as ground level and podium) is very minimal, though it certainly affects subsequent maintenance costs.
- 4.152 One should view the cost issue from the perspective of the whole life cycle of a building, not just from the point of view of construction cost.
- 4.153 Greenery can increase the vitality of an urban city and therefore there is no objection to pay an additional 5-10% on maintenance bill for greenery. However, there should be more guidelines on addressing ‘what’ and ‘how’ in the context of greenery development.
- 4.154 There is no free lunch as we need to think about costs associated with greening and the effects on land premium. The inclusion of green features in buildings will not have a significant impact on the cost of flats, as they are traded on a value basis rather than on a construction cost basis.
- 4.155 The maintenance cost for greenery is not that much and is affordable by the flat owners. The increased capital and maintenance costs could be offset by the possible savings in electricity bills.

#### **OTHER OPINIONS ON GREENERY COVERAGE (CODE NO.: 4.5, 198 TEXT UNITS)**

##### ***Roles of Different Stakeholders***

- 4.156 Apart from the Government’s efforts in ensuring greenery within the building site, green areas in residential complex can be expanded significantly by encouraging residents to participate in greenery actions in their own living environment, such as using the balcony areas and flower groves or planters for growing more potted plants.

- 4.157 Government should vigorously encourage the general public by taking the lead in introducing 'eco-home', 'natural house', 'self build' models in the context of greenery movement.
- 4.158 The question is raised on whether it is the Government's responsibility to provide more greenery for us, rather than developers, who would ultimately transfer the greenery cost to house buyers.
- 4.159 The Leisure and Cultural Services Department (LCSD) can develop more green areas and grass lands and build more plants around parks.
- 4.160 Government should implement the ratio of mandatory greening for different kind of development in term of their occupants, usage, plot ratio and development scale.
- 4.161 Flexibility shall be provided to developers to adopt different kinds of greenery such as landscape garden or green roof to achieve the mandatory greenery ratio.

### ***Driving Forces***

- 4.162 When the greenery covers more than 20% of the site area, incentives should be provided by the Government.
- 4.163 Measurable targets for greening and inclusion of planting in public space at the pedestrian level should be set.
- 4.164 Measurable targets should be set for greening and we should include planting in public space at the pedestrian level.

### ***Impacts of Greenery***

- 4.165 For tree-planting, the reduced carbon emission per year is only 0.01% which is negligible. However, it does give a slight psychological uplifting feeling.
- 4.166 The question is raised on whether there is a quantifiable figure on the relationship between greenery and sustainability, other than just mentioning the visual impact of greenery.
- 4.167 The future problems such as structural and water leakage, dangerous trees after years, obstruction to views by tall trees, etc. associated with more planting need to be highlighted. The normal life span of a building is 50 years, but trees can have hundreds of years of life.

- 4.168 What is the visual impact of greenery – should future high-rise buildings become ‘planter racks’ and lose their design characteristics as a result of extensive greenery.
- 4.169 Greenery is both air filter and insulator.
- 4.170 While planting at sky gardens and roof floors is endorsed, we must be aware of the fact that plant roots could cause damage to the building structure.
- 4.171 Greening will decrease the use of energy and make improvements on the greenhouse effect.

### *Special Considerations*

- 4.172 For greening features in sky gardens, the current height limit (6 metres) is not enough if trees are to be planted.
- 4.173 Coverage of greenery at building sites is not a practical issue to address due to low utilisation rate and high maintenance cost. However, greenery in sky gardens and on refuge floors are more preferred and supported.
- 4.174 Lines of trees and flowers could be planted at strategic locations to mitigate the concrete jungle look of blocks of urban buildings.
- 4.175 Flexibility should be provided for the developer to adopt different kinds of greenery such as landscape garden or green roof to achieve the mandatory greenery ratio.
- 4.176 For development projects, consideration should be given to optimising the preservation of trees on site. A tree survey should be carried out within and, if appropriate, adjacent to the site in order to identify trees or tree groups with a high conservation or amenity value and which deserve to be retained.
- 4.177 One should give some thoughts to the economic and social considerations, such as: Would it cause adverse or positive impact to building and land value? Would urban regeneration be hampered or assisted?
- 4.178 Greenery should not just be focused on the roadside, but can also be extended to barriers between lanes. “Codes for Road Design” should be introduced, incorporating utility free planning zone at pavement and road median wide enough for bigger trees for highways.
- 4.179 It is desirable to introduce ‘high oxygen’ plants for ground level greenery.

- 4.180 Greenery should be looked at on a neighbourhood basis and specific targets in percentage of green coverage from public and private land established.
- 4.181 Lines of trees and flowers could be planted at strategic locations to weaken the concrete jungle look.
- 4.182 Most people would think about that greenery in city means trees and flowers. Could we think of a step forward? How about city agriculture and fishery?
- 4.183 It is recommended to introduce Codes for Road Design, incorporating utility free planning zone at pavement and road median wide enough for bigger trees for highways.
- 4.184 Both communal sky gardens and podium gardens should be encouraged and should not be limited to 6 metres headroom in order to allow more design flexibility and daylight for planting.
- 4.185 For redevelopment project, consideration should be given to optimise the preservation of trees on site. A tree survey is to be carried out within and, if appropriate, adjacent to the site, for identifying trees or tree groups with a high conservation or amenity value and which deserve to be retained.

## THEME 5: GROSS FLOOR AREA (GFA) CONCESSIONS

### Categories of Views:

Overall Comments on GFA Concessions (Code no.: 5.1, 49 text units)

Support for GFA Concessions (Code no.: 5.2, 75 text units)

Against GFA Concessions (Code no.: 5.3, 80 text units)

Administrative Issues (e.g. Transparency, Accountability, etc.) (Code no.: 5.4, 134 text units)

Granting GFA Concessions for Amenity Features (Code no.: 5.5, 88 text units)

Granting GFA Concessions for Essential Features (Code no.: 5.6, 128 text units)

Granting GFA Concessions for Car Parks (Code no.: 5.7, 194 text units)

Granting GFA Concessions for Public Passage (Code no.: 5.8, 56 text units)

Granting GFA Concessions for Green Features (Code no.: 5.9, 304 text units)

Capping GFA Concessions (Code no.: 5.10, 297 text units)

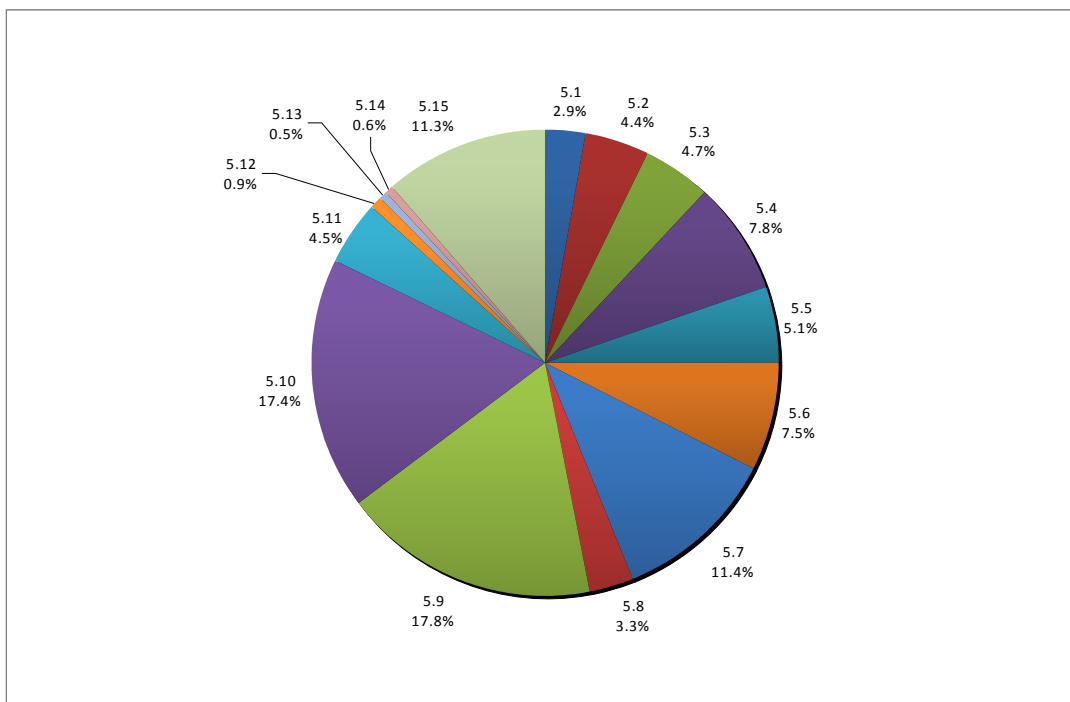
Changes to GFA Concessions Policy (Code no.: 5.11, 77 text units)

Granting GFA Concessions for the Community (Code no.: 5.12, 15 text units)

Granting GFA Concessions for Sky Gardens (Code no.: 5.13, 8 text units)

Granting GFA Concessions for Energy Saving Equipment (Code no.: 5.14, 11 text units)

Other Opinions on GFA Concessions (Code no.: 5.15, 193 text units)



## **SALIENT POINTS ON THEME 5: GROSS FLOOR AREA (GFA) CONCESSIONS (1,709 TEXT UNITS)**

### **OVERALL COMMENTS ON GFA CONCESSIONS (CODE NO.: 5.1, 49 TEXT UNITS)**

#### *Purpose of GFA Concessions (Code no. 5.1.1, 25 text units)*

- 4.186 The purpose of Discounted GFA and Disregarded GFA is to encourage the provision for non-mandatory, but essential and beneficial facilities to augment the function of the building and to better serve the occupants.
- 4.187 GFA concession is a tool for control.
- 4.188 GFA concessions serve as an incentive rather than a requirement, encouraging developers to build particular features to meet public needs, not to benefit the developers. GFA concessions do not constitute transfer of advantages from the Government to developers as suggested in the IR document.

#### *Costs (Code no. 5.1.2, 15 text units)*

- 4.189 The costs associated with these features are not transparent as there are many inconsistent ways of calculating the sold and actual usable areas.
- 4.190 Cancellation of GFA concessions would reduce the land value. Developers would not pay for the land premium, so in the end buyers will have to pay more.
- 4.191 Depending on the quality and sustainability of the green/amenity features, consumers are willing to pay a 5% to 10% premium.
- 4.192 The resultant benefits cannot offset the damages caused by the building height or bulk.
- 4.193 If GFA concessions were to be reduced by 20%, the public should be prepared that their living space would be reduced by 20%, unless the Government would provide more space, e.g., by deploying space from the country parks.
- 4.194 The costs of GFA concessions are actually included in the land premium and reflected in the property value.



- 4.195 For the standard features that aim to provide a safe, healthy and environmental-friendly environment for the residents, the costs should be shared by the residents, owners, and developers.

***GFA is the Most Important Issue (Code no. 5.1.3, 6 text units)***

- 4.196 GFA concessions are an important, complicated issue and need to be addressed.

***Comments on the Term GFA Concessions (Code no. 5.1.4, 3 text units)***

- 4.197 The term “GFA concessions” should be reviewed for the following reasons:
- (a) to avoid any misunderstanding of the good intention of these measures by members of the public; and
  - (b) the term is originally intended to be incentives for developers but not transferring advantages from the Government to developers as suggested in the IR document.

**SUPPORT FOR GFA CONCESSIONS (CODE NO.: 5.2, 75 TEXT UNITS)**

- 4.198 GFA concessions provide many desirable features, such as balconies, more spacious passages, wider roads and essential, as well as green and amenity features (such as electrical and mechanical plant rooms, lifts for firemen, car parks, club houses, greenery, utility platforms, etc.).
- 4.199 Should grant GFA concessions to buildings such concessions provide genuine benefits and improved living environment, through the provision of energy-efficient facilities, the adoption of environmental-friendly concepts and construction methods.
- 4.200 Notwithstanding the fact that GFA concessions may give rise to bulky buildings, those facilities as they are essential. Applying the same GFA concessions to all developments is appropriate.
- 4.201 GFA concessions should be maintained. There should be guidelines and regulations about GFA concessions. The Government should assess if individual building sites warrant GFA concessions.

- 4.202 Existing discretionary exemptions and bonuses have mostly been devised to address specific issues and have been successful.

#### **AGAINST GFA CONCESSIONS (CODE NO.: 5.3, 80 TEXT UNITS)**

- 4.203 With the exception of the fire escape floor, all exempted GFA concessions should be cancelled. Balconies and utility platforms are not new features and they were not entitled to GFA concessions in the old days. GFA concessions should not be granted to green balconies. There is no such need for granting GFA concessions any more. Should reduce GFA concessions or revoke them altogether.
- 4.204 GFA concessions merely give developers more excuses to make money. The building costs are lowered as a result of the concessions, but the units are still sold at the full market price. They also result in the usage rate of the floor area getting lower and lower. The Government should legislate that a housing unit should consist of minimum provisions, including a bedroom, living room, kitchen and bathroom. People have to pay a lot for the housing units. It seems that the Government is dishing out money to developers.
- 4.205 GFA concessions allow developers to add more features to building which become bulkier.
- 4.206 Those building features are a must; hence, there is no need to provide any incentive. There should be legislative control so that property developers have to provide essential features, environmental-friendly features that can improve the living environment. Developers should provide such facilities with or without GFA concessions. If such facilities are not available, people will not buy them.
- 4.207 Those buildings accorded GFA concessions do not benefit the community.
- 4.208 There should not be any GFA concessions, as they can easily be misconstrued as an act of collusion between the Government and the private sector. It would also result in backlash – the responsible official becoming as the subject of a witch-hunt.

#### **ADMINISTRATIVE ISSUES (E.G. TRANSPARENCY, ACCOUNTABILITY, ETC.) (CODE NO.: 5.4, 134 TEXT UNITS)**

- 4.209 Since granting of GFA concession has far reaching implications, transparency and monitoring mechanism are needed, including:

- (a) a clearer, more transparent and fairer system to decide how much GFA concessions should be granted; and
  - (b) with a certain degree of flexibility according to different situations and locations (zones) of the development.
- 4.210 There are problems when too much power is vested in the Director of Buildings. The discretionary power of the BA for granting GFA concessions should be well defined, providing certainty and enhancing transparency and equity. Clear and unequivocal rules and regulations with scientific guidelines should be laid down for industry and BD staff.
- 4.211 Should set up monitoring measures to avoid the policies being abused and exploited by the developers. GFA concessions should be granted on a value-for-money basis. The rationale for granting GFA concessions should be clearly defined in view of the new/emerging requirements and improved living standards.
- 4.212 Related policies should be regularly reviewed and updated.
- 4.213 The practice being used now should be kept, as it has already been accepted by the local professions and the industry. To change it from administrative control to statutory (mandatory) requirement may need a large input of human resources and capital. Prefer a combination of statutory requirements and some degree of discretionary power being applied in particular sites and contextual situations as deemed necessary or desirable.
- 4.214 If the government is to maintain GFA concession policies, it should establish a committee to exercise the authority of granting concessions. Similar to the Town Planning Board, this committee should contain members from non-governmental organisations.

**GRANTING GFA CONCESSIONS FOR AMENITY FEATURES (CODE NO.: 5.5, 88 TEXT UNITS)**

***Support Granting GFA Concessions for Amenity Features (Code no.: 5.5.1, 15 text units)***

- 4.215 GFA concessions for amenity features are definitely necessary, because they would benefit the residents.
- 4.216 Facilities such as swimming pool, club house, gardens, playground for children, etc., which are available within the housing block, should be eligible for GFA concessions as they will ease the demand for public facilities.
- 4.217 Doing away with GFA concession would lead to the removal of desirable components, like recreational facilities, balconies, etc.
- 4.218 Ancillary recreational facilities are essential, and concessions should be maintained.

***Against Granting GFA Concessions for Amenity Features (Code no.: 5.5.2, 49 text units)***

- 4.219 There should not be GFA concessions for amenity features because property developers might use these features as a selling point.
- 4.220 It is inappropriate to grant GFA concessions for a podium which is for commercial use.

***Suggestions on Granting GFA Concessions for Amenity Features (Code no.: 5.5.3, 24 text units)***

- 4.221 Any project with a floor area that exceeds 100,000 square metres, equivalent to about five 40-storey towers, should have a clubhouse with GFA concessions.
- 4.222 Current GFA concessions should be maintained, with some proposed adjustments, including: reducing the maximum percentage for recreational facilities and applying a sliding scale.
- 4.223 Lower the maximum GFA concession for amenity features from 5% to not more than 5%, depending on the ratio to the domestic GFA: domestic GFA of 100,000m<sup>2</sup> or more, maximum concession should be 3%; domestic GFA of 50,000m<sup>2</sup> or less, maximum concession should be 5%.

- 4.224 GFA concessions for private clubhouses should be changed to “one-for-one concession”, i.e. for every one feet of concession, the developers have to provide one feet of floor space.

**GRANTING GFA CONCESSIONS FOR ESSENTIAL FEATURES (CODE NO.: 5.6, 128 TEXT UNITS)**

*Support Granting GFA Concessions for Essential Features (Code no.: 5.6.1, 65 text units)*

- 4.225 There should be GFA concessions for essential features, and mandatory features should continue to be provided with concessions.
- 4.226 Should specify the need to provide essential features in the land sale guidelines.
- 4.227 GFA concessions should be given to facilities or features, such as refuse store chambers.
- 4.228 Oppose to fundamental amendments to disregarded GFA for essential features.
- 4.229 Provision of essential building equipment is necessary and such space should remain as non-accountable GFA.
- 4.230 Should maintain the existing granting practice but the space for such uses could be reduced to the minimum with adverse impact.
- 4.231 If developers want to provide better or bigger facilities (e.g. electrical and mechanical room) above the required standard, GFA concessions should be provided.

*Against Granting GFA Concessions for Essential Features (Code no.: 5.6.2, 42 text units)*

- 4.232 There should not be GFA concessions for essential features. For instance, such facilities as lift shaft, public corridor, elevator, etc. are necessary. They should not therefore be eligible for GFA concessions.
- 4.233 The provision of essential features should be legislated for.
- 4.234 There should be some control on GFA concessions for equipment rooms so as to avoid abuse, e.g. unreasonably oversized rooms. Moreover, GFA concessions for essential features are constantly exploited by the developers. Developers might convert the plant rooms for some other purposes.

- 4.235 When certain facilities become a necessity, GFA concessions should not be accorded. Developers will still provide them, although there is no concession.
- 4.236 GFA concessions should not be granted to refuse storage rooms. Otherwise, they would be getting larger, but under-utilised.

***Suggestions on Granting GFA Concessions for Essential Features (Code no.: 5.6.3, 21 text units)***

- 4.237 Essential features must be of reasonable size and under the scrutiny of the relevant government departments.
- 4.238 The building industry should be widely consulted so that the minimum requirements for those mandatory features can be specified.
- 4.239 Essential features should be defined carefully. They should be absorbed within the overall plot ratio. If certain features are considered to be essential or necessary to produce building quality and sustainability, they should be inserted in the lease conditions as mandatory requirements – but this should be on a site by site basis.

**GRANTING GFA CONCESSIONS FOR CAR PARKS (CODE NO.: 5.7, 194 TEXT UNITS)**

***Support Granting GFA Concessions for Car Parks (Code no.: 5.7.1, 23 text units)***

- 4.240 GFA concessions for car parks should be kept so that sufficient space would be provided for safer parking. If the Government changes the existing policy, people will be forced to park their cars on the streets, resulting in such problems as illegal parking, road congestion and increase of parking fees.
- 4.241 Car parks should be entitled to GFA concessions because they serve aspirational purposes and add value to the quality of life. Accessibility should not be sacrificed. The provision of car parks may affect the incentives for purchasing a flat.
- 4.242 Building car parks at the podium level is to fulfill the requirement for noise control by the Environmental Protection Department. Car parks serve as noise barriers.
- 4.243 Deletion of car parking concessions to address building height and bulk may be an over-simplification of the problem.

- 4.244 The principle of car parks being “disregarded GFA” should be retained.
- 4.245 The current practice of granting GFA concessions for car parks should be maintained because it is based on a long established policy.

***Against Granting GFA Concessions for Car Parks (Code no.: 5.7.2, 80 text units)***

- 4.246 Car parks would affect pedestrian environment and streetscape.
- 4.247 They are necessary facilities; hence, they should not be entitled to GFA concessions. The need for their provision should be included in the land sale conditions.
- 4.248 Disagree to according GFA concessions to car parks because property developers profit from the sale or rental of car parks.

***Suggestions on Granting GFA Concessions for Car Parks (Code no.: 5.7.3, 91 text units)***

- 4.249 Should review the need for car parks, with the opening of various MTR lines. Car parks should not be built next to the train stations so as to encourage people to use public transport and ease the traffic. The supply of car parking spaces should be reviewed, with the ratio of provision lowered, especially for developments close to railway stations. Mass transport system should be encouraged.
- 4.250 There is a need to review relevant policies as there might be a surplus of car park space. The mechanism regarding the calculation of parking space provision should be reviewed.
- 4.251 Car parks should be provided according to the need and characteristics of different districts. Should focus on reducing the number of car parks in residential districts and increasing the number of car parks in non-residential districts.
- 4.252 GFA concessions for car parks built on the first floor or above ground should be halved. GFA concessions for car parks built below ground or at ground level should remain, but need to ensure the provision of sufficient natural ventilation and light.
- 4.253 Current GFA concessions should be significantly reduced by 50% to promote greater use of public transport and/or car pool. The standard for public parking facilities in accordance with the Hong Kong Planning Standards and Guidelines should also be followed.
- 4.254 Automatic stack parking can help reduce building bulk.

- 4.255 Car parks should preferably be built underground. GFA concessions should be granted to car parks built underground where appropriate after considering such factors as cost implications, feasibility (especially in the older districts), ventilation, etc.
- 4.256 While reviewing car parking provisions, considering short-term strategy for traffic reduction should take priority.
- 4.257 Government should review and relax relevant lease conditions where basement storey is counted into the number of storey.
- 4.258 The concessions should be tightened to a maximum cap, following the Hong Kong Planning Standards and Guidelines (HKPSG) public car parking facility standard to exclude loading/unloading area and ingress/egress areas. All floor areas above the standard should be included in GFA calculations.
- 4.259 It is essential to review HKPSG holistically to reflect the current demand before doing away with GFA concession for car parking spaces.
- 4.260 Underground car park can reduce podium height and bulk, but may not be feasible for all sites and there is also the problem of natural ventilation and higher energy consumption.
- 4.261 Mandatory requirement for underground car park can be done via OZP and lease conditions. Detailed design of the underground car park should also be required.
- 4.262 If the car parking and related facilities are provided according to the HKPSG, they can be exempted from GFA calculation as according to the current B(P)R. The Government should also make reference to the views and responses from the general public on 'reduction of car parking space supply' under the public consultation of Air Quality Objectives (AQO) Review.
- 4.263 There should be a review of the transport policy.
- 4.264 GFA concessions for car parks should be adjusted according to the level of the car parks:
- (a) for car parks at 1/F or above, GFA concessions should be reduced by one half, i.e. one-for-one concession; and
  - (b) for car parks at ground or basement levels, GFA concessions should be maintained at the original levels.



**GRANTING GFA CONCESSIONS FOR PUBLIC PASSAGE (CODE NO.: 5.8, 56 TEXT UNITS)**

***Support Granting GFA Concessions for Public Passage (Code no.: 5.8.1, 32 text units)***

- 4.265 Since building setback at the ground level for public passage will enhance pedestrian circulation and quality of streetscape, GFA concessions should be granted.
- 4.266 Since public passages help reduce pollution and heat, GFA concessions should be granted.
- 4.267 Provision of dedicated or surrendered areas for public passage and road widening through concession should be maintained.
- 4.268 The current practice is fair to both the developer and general public.

***Against Granting GFA Concessions for Public Passage (Code no.: 5.8.2, 9 text units)***

- 4.269 There should be regulations for the width of the public passages. They should not be accorded exempted GFA. Before redeveloping the site, there should be space for public passage, public amenity and roads.
- 4.270 GFA concessions for setback should not exceed two times the area of the public passage.
- 4.271 The area for the public passage should be included in the actual or construction floor area.

***Suggestions on Granting GFA Concessions for Public Passage (Code no.: 5.8.3, 15 text units)***

- 4.272 GFA concessions should be granted so as to encourage building occupants to use the covered walkway or tunnel connected with the nearest public transport interchange or MTR stations.
- 4.273 The Government should pay for the maintenance costs if the owners do not maintain the public passage.
- 4.274 If the price of the property will be increased due to the building of a 3-metre tall covered public passage, the land rate should be adjusted accordingly.

- 4.275 Whether or not the increase in building height and bulk through the granting of Bonus PR could be compensated by the benefits of road widening needs to be considered in a wider context. In reality, the value of ground floor areas to be surrendered at different sites varies. As such the current practice of granting Bonus PR irrespective of locations can only encourage developers of less valuable sites, and has proven to be unattractive to developers of valuable sites. In this connection Bonus PR is actually an exchange. Given its nature, it should be segregated from the general consideration of capping GFA concessions. Hence, a more reasonable and flexible approach to compensate the developers should be considered.

### **GRANTING GFA CONCESSIONS FOR GREEN FEATURES (CODE NO.: 5.9, 304 TEXT UNITS)**

#### ***Support Granting GFA Concessions for Green Features (Code no.: 5.9.1, 92 text units)***

- 4.276 The public will be more amenable to the idea that developers are accorded GFA concessions on account of their efforts in benefiting the public through increasing public space, adding green features and improving the air flow. GFA concessions for green features are definitely necessary.
- 4.277 Communal sky gardens and podium gardens should be encouraged.
- 4.278 Since green features will reduce carbon emission, GFA concessions should be granted.
- 4.279 There should not be control in building design, and the Government should not cut back the amount of extra floor space that developers can earn by incorporating green features into their projects.
- 4.280 Facilities for environmental protection such as shades, noise screens, flaps, wind tunnels, etc. will not contribute to building height and bulk. They provide shade, balance the temperature differentiation, and facilitate air ventilation and noise protection.
- 4.281 To take away GFA concessions for green features was to discourage green features and environmental protective measures.
- 4.282 GFA concessions for green features are mostly positive.

- 4.283 Removing GFA concessions for green features would discourage green features and environmental protective measures. This is contradictory to what is promoted in the public engagement exercise.

***Against Granting GFA Concessions for Green Features (Code no.: 5.9.2, 113 text units)***

- 4.284 GFA concessions for balconies, sky gardens, fabricated external walls, etc. are originally intended for the promotion of green environment. However, the system has been abused, creating tremendous problems including inflated building area and unbalanced development of the city. It should be thoroughly reviewed so that the original objective of the policy can be achieved.
- 4.285 GFA exemption for features such as the balcony does not necessarily mean the home-owners would get more space.
- 4.286 Should legislate so that the developers have to meet the stipulated requirements for greening, installing green roof and sky garden.

***Suggestions on Granting GFA Concessions for Green Features (Code no.: 5.9.3, 99 text units)***

- 4.287 Green balcony provides additional space for personal greenery, hence improving the quality of life.
- 4.288 Green balcony design facilitates more natural light entering into the interior part of a building.
- 4.289 It is necessary to maintain the design of balcony in buildings, as it is proven that balcony can help reduce consumption of energy.
- 4.290 Apart from providing space for permanent greenery, green balconies would have additional benefits such as avoiding flat (and monotonous) external appearance of building complex, facilitating air ventilation, help reducing consumption of energy, and acts as a sun-shading device.
- 4.291 Balcony acts as a sun-shading device, blocking the direct sunlight in order to save energy consumption in air conditioning.
- 4.292 Balcony improves the fresh air circulation, maintaining a healthy, high quality life for the residents that save medical expenditure.

- 4.293 Balcony provides open space for laundry so the electricity for drying the clothes is saved.
- 4.294 Green balconies which enable cloth drying and plant keeping should be exempted from GFA calculations. In this connection GFA concessions for balconies should not exceed 3% of the total GFA.
- 4.295 GFA concessions for green and amenity features should include energy-efficient and renewable energy features.
- 4.296 The maximum 300 mm-thick area occupied by prefabricated external walls could be reduced to 200 mm, and the site coverage should not be exempted.
- 4.297 Should consider granting time-limited GFA concessions for certain innovative green features until such time that the technology has been commonly adopted in the industry, or such features have been replaced by other innovative facilities.
- 4.298 Should adopt a recognised local building environmental assessment method, with the availability of GFA concessions proportional to the rating achieved.
- 4.299 There should be detailed guidelines for site areas larger than 1,000 square metres and those below 1,000 square metres.
- 4.300 Developers should learn to absorb the costs for better and greener buildings according to conditions and standards set out. We should work towards a situation where green and amenity features are integrated within new developments which add value in every sense.
- 4.301 Should make reference to the Green Mark Scheme of the Building and Construction Authority of Singapore.
- 4.302 There is a need to reconsider the JPNs and some of the green features which have become accepted provisions (e.g. wider corridors, noise barriers, acoustic fins, sunshades, reflectors, wing walls, wind catchers and funnels) should be adopted as mandatory provisions and become “disregarded GFA” in the context of B(P)R 23(3)(b) with a move towards the inclusion of performance standards.
- 4.303 Current GFA concessions should be maintained, with some proposed adjustments, including: (a) relaxing the headroom limit of 6m for communal sky gardens and podium gardens; and (b) certain areas (say, 50%) for balconies and utility platforms.

## **CAPPING GFA CONCESSIONS (CODE NO.: 5.10, 297 TEXT UNITS)**

### ***Support Capping GFA Concessions (Code no.: 5.10.1, 220 text units)***

- 4.304 All the facilities which are environmental-friendly and can improve the living environment (except for car parks and essential features) should be entitled to GFA concessions, which should be capped at 7%.
- 4.305 GFA concessions for balcony, lift lobby and club house should be reduced. GFA concessions should be capped at 10% of the total floor area. It should be put into force promptly.
- 4.306 There should be a maximum limit, e.g. 8%, of the total floor area.
- 4.307 Agree to set a cap on total GFA concessions in order to control building bulk as well as height.
- 4.308 Should consider capping GFA concessions for private recreational facilities.
- 4.309 Should have a cap for GFA concessions – generous concessions be avoided for features that will add value to the selling price, e.g. greenery, sky gardens, balcony, etc.
- 4.310 Support an overall balance between setting a cap of GFA concessions for green and amenity features, and facilitating innovative and neighbourhood-friendly architecture.
- 4.311 Propose a comprehensive overall cap, and discretion should be accorded to an assessment committee which will be comprised of professionals, academics and representatives from related organisations. The public should also be able to comment on each application.
- 4.312 Cap should only be applied to above-ground GFA concessions. Cap should still provide flexibility and incentive for environmental-friendly building features.
- 4.313 No objection to capping GFA concessions. Exceptional cases should be considered by an independent authority and decision and reasons should be made known to the industry and public.
- 4.314 A cap of not more than 15% of total GFA for GFA concessions. Developers may be allowed to choose the mix of facilities.
- 4.315 There should be a cap on the total GFA for buildings of higher development intensities.

***Against Capping GFA Concessions (Code no.: 5.10.2, 49 text units)***

- 4.316 Instead of restricting/capping, should provide sufficient incentive for developers to think of innovative design solutions and to implement them for the benefits of the building users. Capping GFA concessions will stifle innovative building designs.
- 4.317 Should set minimum standards instead of capping GFA concessions.
- 4.318 Capping GFA concessions fails to meet different conditions for different sites, and it is a short-sighted approach.
- 4.319 Each type of GFA concessions has its own purpose; hence it should not be capped.
- 4.320 If a cap is imposed, the developers will have no incentive to include those facilities to improve the living environment and they might build environmental-friendly facilities on a selective basis. It will also mean that the residents will have fewer facilities that they can benefit from. It will affect the price of the property. The more restrictions being exercised, the more it will impact on the price of the property.
- 4.321 It is undesirable to require a choice between types of desirable facilities to meet an artificial gap and an overall cap is considered unnecessary.
- 4.322 Developing building guidelines rather than capping would be more effective in addressing the issue of building height or bulk.
- 4.323 There should not be a cap for plant rooms.
- 4.324 There should not a cap for underground facilities.
- 4.325 While less GFA concessions tend to result in smaller building bulk, there is no objective correlation between the capping of GFA concessions as a numerical adjustment and actual building environmental performance.
- 4.326 The cap cannot ensure any real gain in terms of quality and sustainability of our built environment, unless and until building control measures can be more closely dovetailed with effective sustainable building design guidelines (such as building separation, podium setback and green coverage) and/or comprehensive building environmental assessment method.
- 4.327 Do not agree that the existing problem is caused by GFA concessions alone. It is a simplistic approach. Hence capping or trimming GFA concessions cannot resolve the problem of height and bulk at all.

- 4.328 Putting an overall cap to GFA concessions without a thorough and overall review of “what is GFA” or “what should be GFA accountable” is risky and unprofessional.

***Suggestions on Capping of GFA Concessions (Code no.: 5.10.3, 28 text units)***

- 4.329 Application of caps should be considered in detail after the PE exercise.
- 4.330 It would be desirable to retain a degree of flexibility and incentive to provide building features and facilities that improve the living standards of the occupants.
- 4.331 Instead of capping GFA concessions, the control should be on plot ratio.
- 4.332 A purposeful dialogue by all the involved parties would be far more effective.
- 4.333 This issue should be considered and approved by an independent authority comprising official and non-official members.
- 4.334 A cap will only be suitable for amenities which are desirable but not if they are mandatory.
- 4.335 There should be some flexibility. Should not impose the same percentage of cap on all the sites since the landscape differs. It should also consider the design context.
- 4.336 There is a need to reassess some concessions. Features in concessionary provisions which have become standard should be encouraged by removing discretionary processes; GFA involved scheme should remain as “Disregarded GFA”; while other provisions, such as the amount of car parking, podium coverage and ancillary recreational facilities in large developments should be subject to further study.

**CHANGES TO GFA CONCESSIONS POLICY (CODE NO.: 5.11, 77 TEXT UNITS)**

***Major Changes (Code no.: 5.11.1, 15 text units)***

- 4.337 Should drastically reduce the total floor area that accounts for GFA concessions.
- 4.338 The measures should be tightened up. It has no direct impact on the developers.
- 4.339 Major changes are needed. Users should bear the costs.

***Minor Changes (Code no.: 5.11.2, 17 text units)***

- 4.340 Having minor changes is the most suitable strategy in order to launch the concept of sustainable building design.
- 4.341 GFA concessions should not be cancelled at one go. In order to reduce building height and bulk, a percentage can be applied within the parameter.
- 4.342 Support moderate changes and introduce development controls in steps.
- 4.343 The following issues of the JPN should be addressed:
- (a) the withdrawal of Notes 1 and 2 of the JPN;
  - (b) the incentive framework by issuing further JPN such as tax savings to encourage the use of construction and demolition materials in sustainable building designs;
  - (c) the limited green and innovative features covered under the revised JPN issued in 2001 and 2002; and
  - (d) more creative solutions in design should be encouraged like those in the JPN.

***No Change (Code no.: 5.11.3, 30 text units)***

- 4.344 The existing GFA concession policy should be maintained.
- 4.345 Changes to the existing GFA policy would have unintended consequences.

***Change by Legislation (Code no.: 5.11.4, 15 text units)***

- 4.346 Legislating an upper limit would be the first step towards fostering a sustainable built environment.
- 4.347 Should change GFA policy through legislative measures.
- 4.348 All types of GFA concessions should be monitored by relevant regulations.
- 4.349 Since changes to the GFA concession policies would have fundamental and profound implications, there should be a reasonable grace period, say 12 months, before any new measures take effect.



**GRANTING GFA CONCESSIONS FOR THE COMMUNITY (CODE NO.: 5.12, 15 TEXT UNITS)**

- 4.350 Should only be granted if the community could benefit from it. Priority should be given to improving the public realm.
- 4.351 Since the benefits (e.g. savings in energy bill) for energy-efficient building design and installation will only go to the property owners, it is illogical for the community to pay for these installations through incentive schemes, such as GFA concessions.
- 4.352 The provision of some public amenities for the community, such as transport terminus, public car park, footbridge, podium (serving as noise barriers), passage way (at ground and podium levels), etc. in certain developments is primarily a requirement of the Government. These amenities are definitely not induced by GFA concessions, but their effect on the building height and bulk is used as a reason to review the GFA concessions.
- 4.353 Consideration should be given to the location of the site and whether or not GFA concessions would contribute to some tangible benefits to the community, such as sustainable development, greater human comfort and improved quality of life.

**GRANTING GFA CONCESSIONS FOR SKY GARDENS (CODE NO.: 5.13, 8 TEXT UNITS)**

- 4.354 Sky gardens should not account for GFA concessions, as residents seldom use them.
- 4.355 Building sky gardens is supported, but there should be control.

**GRANTING GFA CONCESSIONS FOR ENERGY SAVING EQUIPMENT (CODE NO.: 5.14, 11 TEXT UNITS)**

- 4.356 GFA concessions should be granted if features for environmental protection are provided, e.g. greening areas; installations of renewable energy, energy-efficient facilities and water cooling systems; ventilation improvement features, etc.
- 4.357 GFA exemptions should be retained for space used for the installation of water cooling systems.

- 4.358 It is necessary to think how to quantify the extent of concessions relating to each individual means of energy-efficient design since they are virtually unlimited.
- 4.359 In view of the adverse impact brought about by GFA concessions, they should not be used to promote energy-efficient building design. Other measures should be considered in order to achieve energy efficiency.
- 4.360 Should consider giving GFA concessions or tax exemptions to encourage energy efficient building designs and installations.
- 4.361 Should not use concessions for encouraging adoption of energy efficient designs.
- 4.362 Granting of GFA concessions should be linked to energy efficiency or a set of environmental performance indicators.

**OTHER OPINIONS ON GFA CONCESSIONS (CODE NO.: 5.15, 193 TEXT UNITS)**

- 4.363 Criteria on eligibility for GFA concessions should be set.
- 4.364 Should make reference to international practices and standards.
- 4.365 GFA concessions should be based on the developer's individual proposal, and granted with conditions.
- 4.366 Need to encourage the developers, instead of just relying on GFA concessions, to reduce building height or bulk.
- 4.367 GFA should be replaced by Gross Tenantable Area (GTA).
- 4.368 Instead of giving GFA concessions, the Government could consider reducing the land premium or providing compensations to the developers, in the event that extra costs have been incurred as a result of including sustainable features.
- 4.369 Should reduce GFA limit or plot ratio.
- 4.370 If it is to provide homes for the elderly, GFA concessions can be considered.
- 4.371 Incentives should only be offered for features which are clearly cutting-edge and ground-breaking. Other features should not be eligible for GFA concessions.
- 4.372 It should be controlled administratively (e.g. codes of practice and practice notes), allowing flexibility for the designers to suit individual cases.

- 4.373 New policies on GFA concession will have fundamental and profound implications, hence a reasonable grace period, say 12 months, should be allowed.
- 4.374 Tightening of GFA concessions would not affect the desire for land auction. Although lower density may lessen Government revenue, it will mean better living environment and hence increase in property value – a positive long-term impact. Besides, lower development densities would mean lower capital cost, which will, in turn, attract smaller developers to auction for the land.
- 4.375 An effective use of the “design, disposition, height” clause in lease conditions and review of OZP would be a better control for building height and density. The Government should set up an inter-departmental committee to study the issue of GFA concessions related to this.
- 4.376 GFA concessions can be given to basement areas to reduce height of the building at locations where capping of building height is desirable or needed, e.g. the waterfront.
- 4.377 Concessions in the form of reduced Government rentals and rates should be considered for facilities/features which require expensive maintenance costs.
- 4.378 Discussion on GFA concession should not be mixed up with that of inflated buildings, which are only results of the labeling strategy of developers. There is no direct correlation with the amount of concessions granted.
- 4.379 While universal concessions or restrictions do not provide the answer, discretion related to site-specific attributes is necessary. It is necessary to achieve both site-specific flexibility and wider scale district planning.
- 4.380 If bonus for dedication is not acceptable for reason of bulk, public resumption is the only fair approach.
- 4.381 Should consider requiring all private developments to adopt a recognized local building environmental assessment method as pre-requisite for any GFA concessions for green and amenity features; the higher their achieved rating, the more GFA concessions may be available. The recognized local building environmental assessment method should specifically address environmental challenges, such as air ventilation assessment, heat island mitigation, green coverage etc.
- 4.382 Should consider Singapore’s latest regulatory experience.

- 4.383 It is the appropriate time to review the current GFA concession policy to re-affirm their fairness and reasonableness.
- 4.384 Any piecemeal change to the complicated building control system is not recommended.
- 4.385 Consideration could be given to a limit for bay window area, as bay windows make the building look slightly bulkier.
- 4.386 Suggest a review of the Bay Window Allowance.
- 4.387 The most effective means is to lower the plot ratio instead of removing GFA concessions.

## **THEME 6: ENERGY EFFICIENT BUILDING DESIGN AND INSTALLATIONS**

### **Categories of Views:**

Support for Mandatory Energy Efficient Building Design and Installations (Code no.: 6.1, 41 text units)

Against Mandatory Energy Efficient Building Design and Installations (Code no.: 6.2, 1 text unit)

Suggestions on Improving Energy Efficiency (Code no.: 6.3, 417 text units)

Guidelines Flexibility (Code no.: 6.3.1, 2 text units)

Use of Renewable Energy (Code no.: 6.3.2, 205 text units)

Incentives to Save Energy (Code no.: 6.3.3, 23 text units)

Education on Energy Efficiency and Sustainable Development (Code no.: 6.3.4, 73 text units)

Other Suggestions on Improving Energy Efficiency (Code no.: 6.3.5, 113 text units)

Costs of Energy Efficiency (Code no.: 6.4, 16 text units)

Improvement of Lighting System (Code no.: 6.5, 154 text units)

Improvement of Air-conditioning System (Code no.: 6.6, 47 text units)

Specific Energy-saving Ideas (Code no.: 6.7, 386 text units)

Solar Orientation (Code no.: 6.7.1, 21 text units)

Building Materials (Code no.: 6.7.2, 104 text units)

Use of New Technology (Code no.: 6.7.3, 16 text units)

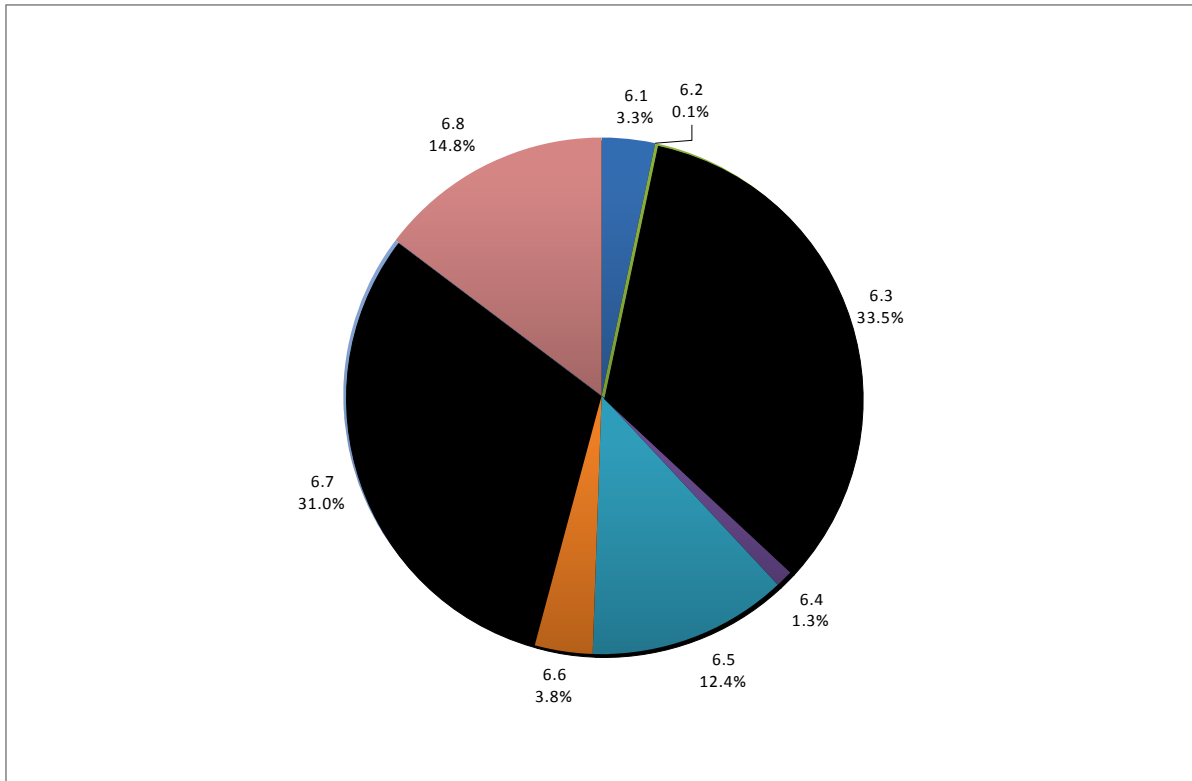
Construction Method (Code no.: 6.7.4, 35 text units)

Convection of Windows (Code no.: 6.7.5, 22 text units)

Piping and Water Treatment (Code no.: 6.7.6, 27 text units)

Recycling (Code no.: 6.7.7, 44 text units)

Other Opinions on Energy Efficiency (Code no.: 6.8, 184 text units)



## **SALIENT POINTS ON THEME 6: ENERGY EFFICIENT BUILDING DESIGN AND INSTALLATIONS (1,246 TEXT UNITS)**

### **SUPPORT FOR MANDATORY ENERGY EFFICIENT BUILDING DESIGN AND INSTALLATIONS (CODE NO.: 6.1, 41 TEXT UNITS)**

- 4.388 There should be mandatory measures for energy efficiency design and installations in buildings.
- 4.389 Use legislative measures to promote the adoption of renewable energy.
- 4.390 Passing government legislation – mandating energy efficiency in building codes should be the first step towards making sustainable building design.
- 4.391 The guidelines provided by the government are generally adequate. Yet, there would be a need for legislation to ensure more energy-efficient designs and installations to be implemented by developers.
- 4.392 There should be regulatory measures that drive the use of environmental-friendly design, equipment and materials.

- 4.393 There should be targets set by the government with participation of consumers, developers and the Government.
- 4.394 We should stipulate the use of recyclable energy through legislative measures.
- 4.395 Mandatory regulations should be set up by legislation on adopting energy efficient guidelines such as the application of green label.
- 4.396 Energy efficiency could be enforced through new rules or bills, instead of through encouragement and incentive to developers. This is the same as setting new emission standard on cars which is far more effective.
- 4.397 The regulations will impose the minimum requirement but there should be incentives to go beyond the minimum, and they do not need to be GFA incentives.
- 4.398 Mandatory Building Energy Efficiency Code and the enlarged Mandatory Energy Efficiency Labels Scheme should be enacted immediately.
- 4.399 It is time to extend those energy efficiency schemes to be mandatory and introduce them into Building (Energy Efficiency) Regulation (Cap.123).

#### **AGAINST MANDATORY ENERGY EFFICIENT BUILDING DESIGN AND INSTALLATIONS (CODE NO.: 6.2, 1 TEXT UNIT)**

- 4.400 Improving energy efficiency on a compulsory basis is not necessary. As a matter of fact, developers and builders in Hong Kong are willing to voluntarily design buildings with high energy efficiency to improve a property's potential value.

#### **SUGGESTIONS ON IMPROVING ENERGY EFFICIENCY (CODE NO.: 6.3, 417 TEXT UNITS)**

##### ***Guidelines Flexibility (Code no.: 6.3.1, 2 text units)***

- 4.401 There should be a certain degree of flexibility in the guidelines for improving energy efficiency.

***Use of Renewable Energy (Code no.: 6.3.2, 205 text units)***

- 4.402 Hong Kong as a more advanced and developed city should take the lead in adopting the use of renewable energy. Renewable energy in general should be considered in replacement of conventional electric power generating facilities.
- 4.403 The introduction of the solar panels can help to reduce the pollution from burning fossil fuel.
- 4.404 Installation of solar panels on buildings in Hong Kong should be implemented extensively to enable applications in water heating, heat insulation and supply of electricity within a building. Both wind turbines and solar panels can be installed on the roof to generate electricity for use within a building.
- 4.405 Incentives should be given to new buildings for development of distributed energy systems with installation of renewable energy facilities.
- 4.406 A target of having 40% of total electric power supplied by renewable energy sources within a timeline should be set.
- 4.407 Long-term research and development plans for renewable energy should be formulated in order to tackle problems associated with climate change. Hong Kong should take advantage of DuPont's local presence of a solar-panel research and development centre for various possible applications.
- 4.408 There are suitable locations for installation of solar panels as Hong Kong has high exposure to sunlight.
- 4.409 Solar-thermal energy would not benefit small-scale building projects.
- 4.410 The Government should provide some support to China Light & Power and Hong Kong Electric in their development of renewable energy projects in the Pearl River Delta Region.
- 4.411 More wind turbines and solar power facilities should be built by the two electric utilities in Hong Kong to replace traditional power plants that continue to rely on fossil fuel.
- 4.412 Other renewable energy sources, including wave power and hydro power, should be developed.
- 4.413 Storage facilities for solar power should be developed.
- 4.414 It is suggested to set target for implementation of visionary set of codes, such as renewable energy as 40% of the overall sources of electricity by 2020.



***Incentives to Save Energy (Code no.: 6.3.3, 23 text units)***

- 4.415 Government should provide incentives to save energy in the funding to perform audit of energy efficiency, high quality building prizes to promote sustainable building design, or subsidy for installation of solar panels in buildings.
- 4.416 Government should provide incentives to reduce consumption of electricity at peak load.
- 4.417 Government should nurture the development of energy savings initiatives and provide support to suppliers for energy efficiency.
- 4.418 GFA concessions and tax exemptions should be granted to energy efficient building designs and installations.

***Education on Energy Efficiency and Sustainable Development (Code no.: 6.3.4, 73 text units)***

- 4.419 There is a need to foster a change of mindset in both the industry and community at large.
- 4.420 It is necessary to provide education about energy efficiency to the public.
- 4.421 The engagement has highlighted the need to conduct wider public education campaign at different levels to increase public awareness toward town planning for a sustainable living environment in Hong Kong, and, more importantly, to empower members of the public for knowledge-based multilateral debate to shape our city.
- 4.422 The curricula of primary schools, secondary schools and universities should include topics on energy efficiency.
- 4.423 There should be education on lifestyle for sustainability.
- 4.424 A culture of sustainable development is critical to induce behaviour in day-to-day living activities for energy efficiency.
- 4.425 Government should educate the community on the concept of the “sustainable development” so as to simulate the stakeholders to prove feasible solution, suggestion and idea that is balancing with all the aspects when discussing on new development.

***Other Suggestions on Improving Energy Efficiency (Code no.: 6.3.5, 113 text units)***

- 4.426 There should be a holistic approach with regard to energy conservation.
- 4.427 Implementation standards for energy efficiency should be developed.
- 4.428 Government should build a model village to demonstrate effective energy efficiency. Guidelines with regular update, education and benchmarking with world leading examples should be utilized.
- 4.429 The public housing estates under Housing Authority should undertake measures to reduce wasteful consumption of electricity.
- 4.430 Evaluation of energy efficiency should be made on a performance-based approach.
- 4.431 Adoption of control systems and technology should be encouraged. Such adoption should include installation of energy-efficient air-conditioning systems, LED light bulbs, energy-efficient electrical appliances, building energy control and lighting management systems.
- 4.432 Government can provide subsidy / payback as incentives to lower the costs needed for the installation of energy efficient devices.
- 4.433 Mandatory Building Energy Code (for lighting, air conditioning, electric installations, etc.) should be advocated.
- 4.434 There should be driving factors or incentives for the desired changes. For instance, there should be creation of win-win situation, tax reduction, improving the consciousness about the environment and use of education.
- 4.435 Government can provide funding to perform audit on energy efficiency.
- 4.436 Since the government has recently planned to launch the Building Energy Code (the "BEC") the government should review the result and effectiveness of the BEC after a reasonable trial period.
- 4.437 Performance test is proposed. The developers need to demonstrate the sustainable performance of their architectural design. The authorities should set several sustainable indicators for reference (e.g. electricity consumption, air ventilation, reduction of temperature etc.).
- 4.438 Consideration should also be given to introducing the assessment of environment performance of buildings, like Hong Kong Building Environmental Assessment method.

- 4.439 A comprehensive environmental performance assessment and registration system should be developed in order to enhance the overall performance in energy consumption and other environmental aspects of a building.
- 4.440 Efforts should be made to enable all Hong Kong buildings to comply with or exceed the prevailing Building Energy Code by 2020. Energy consumption would then be reduced.
- 4.441 Double-glazed windows that improve heat insulation could be applied in old buildings as well as new buildings.

#### **COSTS OF ENERGY EFFICIENCY (CODE NO.: 6.4, 16 TEXT UNITS)**

- 4.442 Costs associated with energy efficiency, including the environmental impact, installation and maintenance, should be considered.
- 4.443 Most energy efficient devices are expensive with long payback period.
- 4.444 Cost is an important factor for the developers.
- 4.445 Adequate and reasonable balance between energy consumption and cost for the additional or upgrade building design is important.
- 4.446 More information should be provided on potential cost savings from reduced energy bills, and on benefits to the environment arising from the use of energy efficiency feature.
- 4.447 The long term savings in energy usage would be of advantage to the users of new buildings.
- 4.448 Energy cost saving for a sustainable design building far exceeds the extra capital cost incurred.
- 4.449 The cost of “greening” a building in China is not as expensive as people think, typically being around 4 to 5 percent of the cost of a new building.
- 4.450 Should consider long-term economic benefits. For instance, if the cost for solar panel is still very high, it might not be feasible to install them extensively.
- 4.451 The inclusion of sustainable features and facilities in new buildings is not likely to be a significant factor in the cost to the end user who is purchasing a new property.

### **IMPROVEMENT OF LIGHTING SYSTEM (CODE NO.: 6.5, 154 TEXT UNITS)**

- 4.452 The use of exterior decorative lighting should be reduced.
- 4.453 Government should implement energy control and energy efficient lighting systems in public facilities.
- 4.454 Strengthened and transparent glasses can be used to construct the outermost wall of the building, allowing better penetration of natural sunlight to the apartments inside.
- 4.455 Installation of lamps in the corridors and rooms with light gates or sensor to save energy or lighting in case of vacant room or high surrounding light intensity.
- 4.456 The Atrium at one of Hong Kong Land Properties is a perfect example of using the natural light, which is energy-efficient.
- 4.457 LED light bulbs should be used as they can reduce energy consumption.
- 4.458 In other countries, there are roads that don't have lights at all, given that each vehicle should turn on its headlights anyway.

### **IMPROVEMENT OF AIR-CONDITIONING SYSTEM (CODE NO.: 6.6, 47 TEXT UNITS)**

- 4.459 Energy savings should be sought in the use of air-conditioning.
- 4.460 Air-conditioning should be set at 25 degrees Celsius in order to reduce consumption of electricity.
- 4.461 Water cooling system should be utilised to improve energy efficiency for air-conditioning.
- 4.462 Emission of heat from air conditioners of existing buildings may be placed in an unfavourable position leading to the building up of heat. This could be improved by adopting a different building design to change the orientation of the air conditioner.
- 4.463 Centralised air conditioning systems are more preferred, even in domestic buildings.
- 4.464 The use of absorption chiller to replace compression chilling is suggested for air-conditioning system.

- 4.465 It is recommended to promote the adoption of district cooling system in large new development areas (such as Kai Tak) and districts under transformation (such as Kwun Tong).
- 4.466 The use of multi-split type air conditioners instead of window units to enhance efficiency and reduce noise propagated to the interior is recommended.

## **SPECIFIC ENERGY-SAVING IDEAS (CODE NO.: 6.7, 386 TEXT UNITS)**

### ***Solar Orientation (Code no.: 6.7.1, 21 text units)***

- 4.467 Adoption of building design that enables the use of natural sunlight should be encouraged so as to minimise electricity consumption for lighting.

### ***Building Materials (Code no.: 6.7.2, 104 text units)***

#### ***Use of Prefabricated Building Materials (Code no.: 6.7.2.1, 47 text units)***

- 4.468 Utilisation of prefabricated building materials should be encouraged so as to reduce and re-use the wastes resulting from construction work.

#### ***Environmentally-friendly Materials (Code no.: 6.7.2.2, 57 text units)***

- 4.469 Utilisation of eco-friendly materials should be encouraged so as to reduce overall wastes and pollution resulting from construction work.
- 4.470 High quality materials used during construction will keep the building in good shape and condition for years. This includes the framework and the exterior.
- 4.471 Bamboo is also very eco-friendly because it is biodegradable and it grows very fast.

#### ***Use of New Technology (Code no.: 6.7.3, 16 text units)***

- 4.472 More innovative solutions for energy efficiency based on emerging technologies should be used including technology for heat recovery, insulation, and water recycling.

- 4.473 We should take advantage of technological breakthrough (e.g. double-deck lifts which can optimize the traffic flow).
- 4.474 Both vertical and horizontal solar shading could add to building features and energy efficiency.

***Construction Method (Code no.: 6.7.4, 35 text units)***

- 4.475 It is necessary to review the construction methods utilised in order to ensure that the overall processes are environmental-friendly and that wastes resulting from construction are minimised.

***Convection of Windows (Code no.: 6.7.5, 22 text units)***

- 4.476 It is necessary to ensure that there is an effect of convection by the installed windows in buildings so as to deliver energy efficiency.
- 4.477 It is necessary to have strict implementation of regulations for governing windows and a public awareness campaign are the rights of residents and workers to natural light and ventilation.

***Piping and Water Treatment (Code no.: 6.7.6, 27 text units)***

- 4.478 It is necessary to look into installation and maintenance of both piping and water treatment systems within a building while considering overall energy efficiency.
- 4.479 Rain water could be collected for reuse such as plants watering and flushing.

***Recycling (Code no.: 6.7.7, 44 text units)***

- 4.480 Encouragement to recycling is needed.
- 4.481 For the new buildings that build from now onwards, the government can force the development company to build a built-in recycling chute at each home so that people can immediately throw the recyclable materials into the chute to the ground floor for collection by the cleaners.

***Other Specific Energy-saving Ideas (Code no.: 6.7.8, 117 text units)***

***Ventilation Assessment (Code no.: 6.7.8.1, 15 text units)***

- 4.482 Adoption of building design that enables the use of natural air ventilation should be encouraged so as to minimise electricity consumption for air-conditioning.
- 4.483 Re-orientating the building towards wind, together with enough windows for convection is suggested.
- 4.484 With respect to design, there should be “hollow space” for natural ventilation or air flow.
- 4.485 Air Ventilation Assessment (AVA) is an accepted tool in Hong Kong and in other counties.

***Electrical Appliances (Code no.: 6.7.8.2, 17 text units)***

- 4.486 Adoption of control systems and technology should be encouraged. Such adoption should include installation of energy-efficient air-conditioning systems, LED light bulbs, energy-efficient electrical appliances, building energy control and lighting management systems.
- 4.487 When more and more energy efficient equipment are made available, the cost of them will decrease.

***Heat Insulation (Code no.: 6.7.8.3, 73 text units)***

- 4.488 Green roofs should be adopted to provide heat insulation and to reduce electricity consumption.
- 4.489 Installation of eco-friendly windows for heat insulation should be encouraged.
- 4.490 Double-glazed windows that improve heat insulation could be applied in old buildings as well as new buildings.
- 4.491 Some sunshades curtains should be installed to reduce the heat gain.
- 4.492 The use of double-glazing, double wall, or other relevant technology is recommended to minimize heat gain or loss.

***Management System (Code no.: 6.7.8.4, 12 text units)***

- 4.493 Property management has an important role through implementation of practices to improve energy efficiency.
- 4.494 There should be effective monitoring of energy use with public participation.
- 4.495 Implementation standards for energy efficiency should be developed.
- 4.496 Good property management could help to maintain or improve the health and hygiene conditions of a built environment.

**OTHER OPINIONS ON ENERGY EFFICIENCY (CODE NO.: 6.8, 184 TEXT UNITS)**

- 4.497 Property developers should provide energy-saving installations in development of buildings. They should be given certain incentives.
- 4.498 Electric utility companies should participate with building users in introducing energy efficiency solutions.
- 4.499 Hong Kong should learn from the experiences in China and other countries about energy efficiency, e.g. subsidy used by the Mainland Government in promoting solar energy should be considered.
- 4.500 Hong Kong falls behind other developed countries in the design of energy efficient buildings. Hong Kong should benchmark other countries regarding energy efficiency.
- 4.501 Energy efficiency concerns people's living habits. People should consider "carbon footprint" and the goal of achieving zero carbon.
- 4.502 There is a need to look into the benefits of energy efficiency options with consideration of their lifecycle impact on the environment.
- 4.503 Government should commission studies to establish new sets of rules and design practices for the more energy efficient building service systems design.
- 4.504 Developers can first install those energy-efficient installations with more obvious economic payback, and then use the profits to invest in other energy-efficient installations that may provide less economic payback.



- 4.505 Double-deck lifts should be encouraged because they could accommodate more people and thus save energy.
- 4.506 A building should be constructed according to the principles of sustainability right at the beginning of the construction. This would be better than improving a building that is of low energy efficiency afterwards.
- 4.507 On natural ventilation, there is a tendency of building top-hinged windows instead of the traditional side-hinged windows in new domestic buildings. Research findings have found that the natural ventilation performance of the former is weaker than the latter.
- 4.508 An expansion of the product energy-labeling programme could incentivise installation of the best class of appliance rather than the cheapest and so achieve notable improvements in residential building energy performance.
- 4.509 The government's proposal to mandate the adoption of the Code of Practice for Energy Efficiency in 1998 issued by the Electrical and Mechanical Services Department is supported.
- 4.510 All buildings should be required to make public the information about how much energy and water are used per square metre.
- 4.511 The government should demonstrate the long term benefits in terms of both running cost and both environmental and social benefits of these energy efficient building designs to the building owners and developer.

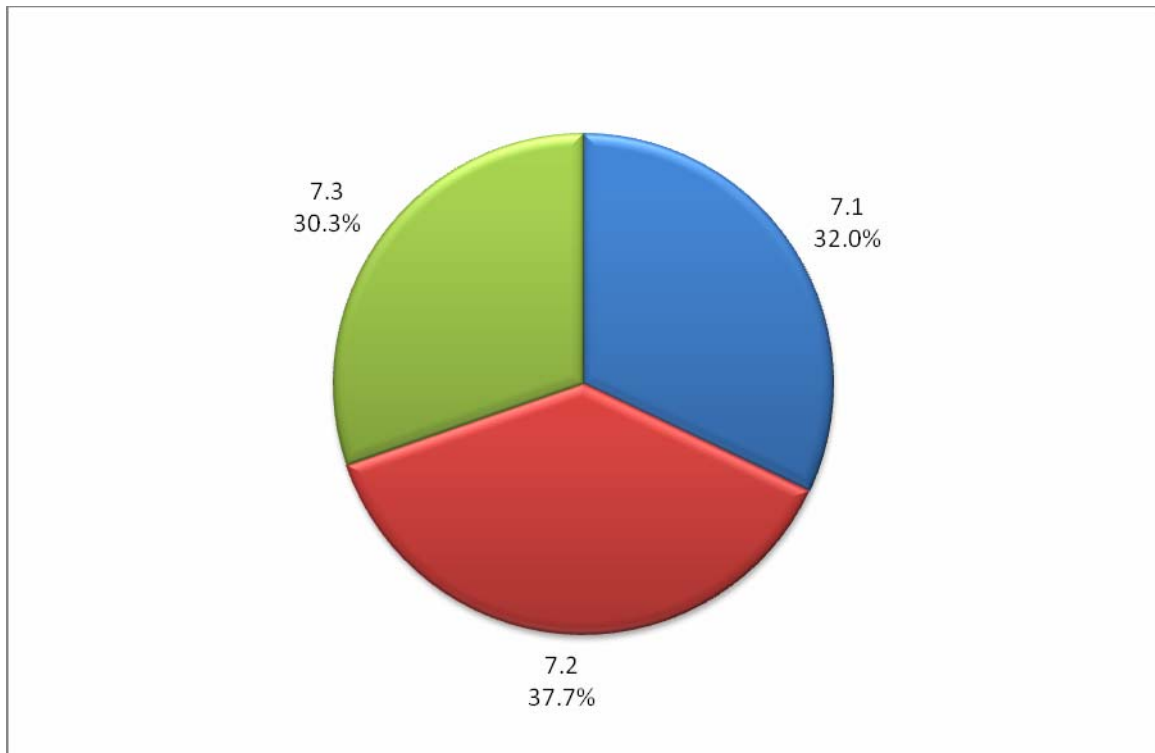
## THEME 7: BUILDING HEIGHT

### Categories of Views:

Support for Setting Limit to Building Height (Code no.: 7.1, 91 text units)

Against Setting Limit to Building Height (Code no.: 7.2, 107 text units)

Other Opinions on Building Height and Bulk (Code no.: 7.3, 86 text units)



## **SALIENT POINTS ON THEME 7: BUILDING HEIGHT (284 TEXT UNITS)**

### ***Support for Setting Limit to Building Height (Code no.: 7.1, 91 text units)***

- 4.512 The Government should set up a task force or committee to limit building height and closely monitor the development density of the new towns.
- 4.513 The Government should set standards for building height and bulk but more emphasis should be placed on building bulk.
- 4.514 The Government should legislate to limit the number of storeys of buildings: suggestions range from 20 storeys to 40 storeys.
- 4.515 To provide better ventilation, building height at the harbour or sea side facing prevailing winds should be controlled.
- 4.516 Buildings should be layered with lower buildings close to the coastline and ideally buildings should be less than 12 to 30 storeys high.
- 4.517 Government should require property developers to submit engineering calculations (e.g. by “computational fluid dynamic”, simulation programmes, etc.) for buildings taller than 10 storeys. Such submissions should be endorsed by professional mechanical engineers who check whether the design of these buildings would cause obstruction of urban ventilation.
- 4.518 The Planning Department should set different standards on building height for different geographical areas.
- 4.519 The Outline Zoning Plan (OZP) and plot ratio could not limit building height effectively.
- 4.520 Height restrictions should be stated as “a number of storeys above ground” in the OZP.
- 4.521 Limiting building height and restrictions on the base platform of buildings would help improve air ventilation and improve air quality.
- 4.522 To protect the ridgeline, there should be some restrictions on building height by making reference to those set by the Town Planning Board.

***Against Setting Limit to Building Height (Code no.: 7.2, 107 text units)***

- 4.523 There should not be a limit on building height since a cap on building height should be determined by factors such as population, flow of pedestrians, etc.
- 4.524 With the same plot ratios, a limitation of building height would lead to even closer buildings and more serious air flow problems.
- 4.525 When encouraging building separation, building height should be relaxed simultaneously.
- 4.526 Relaxation of building height is more important as compared with the protection of ridgeline.
- 4.527 Regulation on building separation and bulk would be more effective than regulation on building height.
- 4.528 Limiting building height would only reduce the “wall effect building” effect by 5-10%.
- 4.529 Increasing building height can house more flats and thus residents under the same land area, this can solve the problem of scarcity of land in Hong Kong.
- 4.530 The building height and bulk issue should be dealt with by a separate set of control parameters or requirements derived from visual impact study and air ventilation assessment.
- 4.531 Building height should vary with development sites. Before any conclusion of building height is made, engineering tools such as wind tunnels, simulation and scientific calculations should be employed.
- 4.532 A simple height restriction without a change in other design parameters does not help reduce the density and may even worsen the “walled” effect.

***Other Opinions on Building Height and Bulk (Code no.: 7.3, 86 text units)***

- 4.533 There is a link between GFA concessions and building bulk and height.
- 4.534 The inclusion of government, institutional and community facilities within private developments adds to the overall height and bulk of these buildings.
- 4.535 Building height and bulk are important factors that affect visual and air qualities.

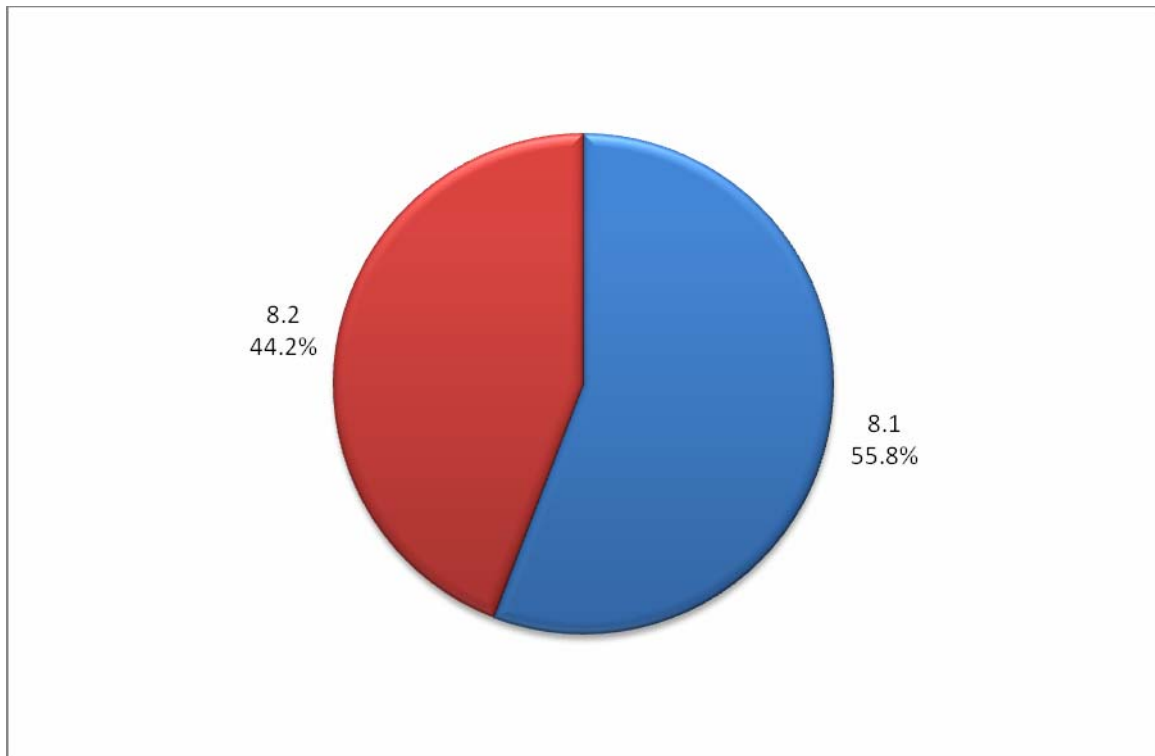
- 4.536 The Government should review and relax relevant lease conditions where basement storeys are counted into the number of storeys.

## THEME 8: OVERALL TRADE-OFFS

### Categories of Views:

Short-term Benefits vs Long-term Benefits (Code no.: 8.1, 67 text units)

Specific Stakeholders' Interests vs Public Interests (Code no.: 8.2, 53 text units)



## **SALIENT POINTS ON THEME 8: OVERALL TRADE-OFFS (120 TEXT UNITS)**

### ***Short-term Benefits vs Long-term Benefits (Code no.: 8.1, 67 text units)***

- 4.537 Real estates are very important sources of taxation income for the Government. Citizens should strike a balance between a better environment and loss of Government revenue.
- 4.538 Tightening the control over GFA concessions would reduce government revenues but improve the living environment. Such improvement would increase the value of flats and give long-term benefits to both the property industry and the overall economy.
- 4.539 Green features would improve the social environment and lower the operation costs of flats. A long-term cost saving would be achieved.
- 4.540 There is a conflict between maximising short-term gain and achieving long-term values with sustainability.
- 4.541 In the long run, interests between the economic and social environments should be balanced.
- 4.542 The authority should present cost-benefit analysis to the public but not a superficial conclusion.
- 4.543 Healthier life and moral values cannot be evaluated in pure monetary terms.
- 4.544 A more sustainable built environment would bring long-term benefits and values to Hong Kong. Thus, a comprehensive approach is needed even though there is short-term loss in revenues.
- 4.545 A lower overall density development with more open space for greenery and air corridors would bring greater advantages to Hong Kong in the long term.

### ***Specific Stakeholders' Interests vs Public Interests (Code no.: 8.2, 53 text units)***

- 4.546 Specific interests of the major stakeholders should be balanced with public interests.

- 4.547 When considering costs and benefits, the concept of “collective gain” should apply, that is, the improvement of overall environment due to certain building design or facilities.
- 4.548 There should be a balance between regulations, incentives and investment returns. Then, sustainability features and sustainable investment would work together.
- 4.549 The health of the public is more important than the economic well being of the Government or some minority interest groups.
- 4.550 The Government should take into consideration the whole property market and economic development. If the costs are borne by the end-users, the property market would be affected.
- 4.551 When property prices are high, it would be difficult to ask the end-users to pay for “sustainable features” by themselves.
- 4.552 Inclusion of green features and amenities would add to the bulk of a building. This would involve a trade-off in which overall economic impacts should be considered.
- 4.553 If the costs incurred to build a sustainable built environment are to be borne by the end-users, they may not be willing to pay for facilities that are built for the public good.
- 4.554 Social costs should be considered.
- 4.555 The Government should focus on sustainability and living quality but not on financial considerations.
- 4.556 A vicious cycle might be formed so that flat owners and the public would suffer. If an improvement in the quality of a built environment hurts the reasonable returns of investors, the investment intention of developers may be reduced. As a result, the job opportunities of construction workers would be affected, the quantity of construction projects would be reduced, the supply of flats would be reduced, and finally the price of flats would increase.
- 4.557 To balance the interests between different parties, the beneficiaries of the improved built environment should pay the costs.



## **THEME 9: ROLES OF KEY STAKEHOLDERS**

### **Categories of Views:**

Government's Role (Code no.: 9.1, 446 text units)

Leadership (Code no.: 9.1.1, 51 text units)

Responsiveness (Code no.: 9.1.2, 78 text units)

Coordination (Code no.: 9.1.3, 25 text units)

Impartiality (Code no.: 9.1.4, 26 text units)

Accountability and Transparency (Code no.: 9.1.5, 39 text units)

Involve the Public (Code no.: 9.1.6, 35 text units)

Incentives and Penalties (Code no.: 9.1.7, 63 text units)

Define Sustainable Building Design (Code no.: 9.1.8, 7 text units)

Street Shadow Area (Code no.: 9.1.9, 7 text units)

Building Management (Code no.: 9.1.10, 5 text units)

Funding (Code no.: 9.1.11, 5 text units)

Other Roles of Government (Code no.: 9.1.12, 105 text units)

Developers' Role (Code no.: 9.2, 74 text units)

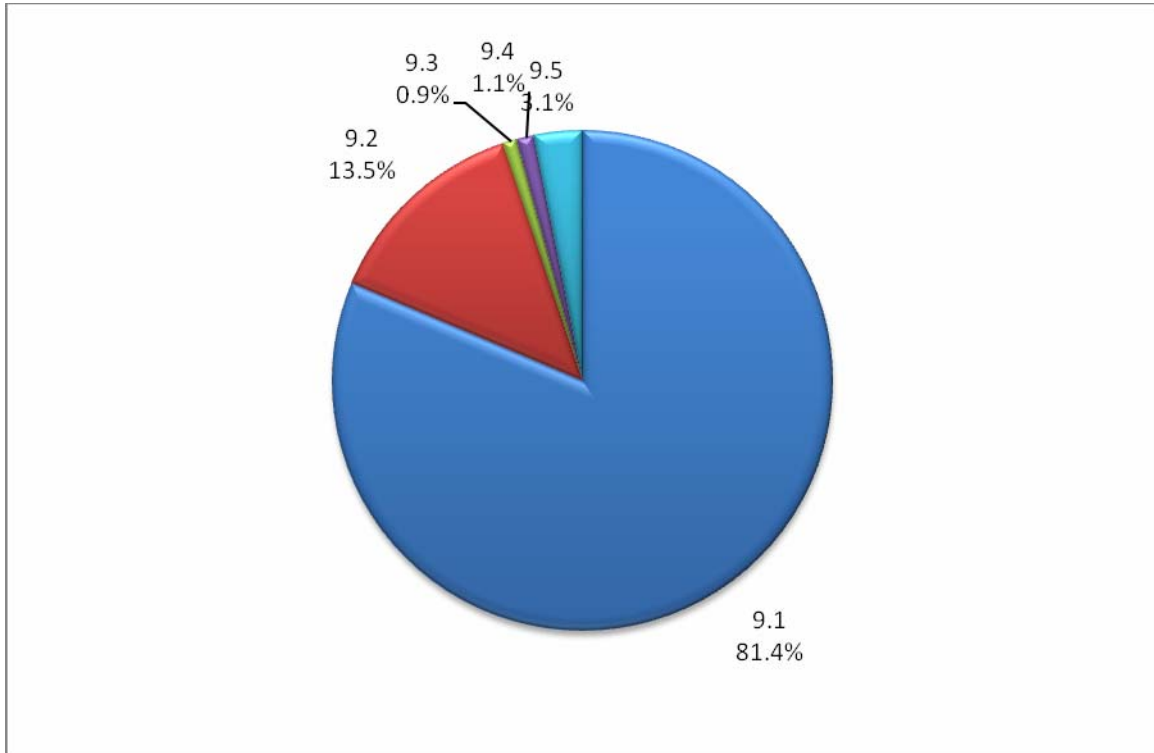
Build Non-mandatory Features (Code no.: 9.2.1, 5 text units)

Other Roles of Developers (Code no.: 9.2.2, 69 text units)

LegCo's Role (Code no.: 9.3, 5 text units)

Users' Role (Code no.: 9.4, 6 text units)

Cooperation between Different Stakeholders (Code no.: 9.5, 17 text units)



## **SALIENT POINTS ON THEME 9: ROLE OF KEY STAKEHOLDERS (548 TEXT UNITS)**

### ***Government's Role (Code no.: 9.1, 446 text units)***

#### ***Leadership (Code no.: 9.1.1, 51 text units)***

- 4.558 Government should take the lead in improving the living environment and quality of life, and should be a champion with strong leadership, playing a “manager’s role. It should set clearer guidelines and targets.
- 4.559 Government should play a leading role in OZP, certification requirements and legislation.
- 4.560 Government should use its power to control building bulk/height, and more controls should be given to the Planning Department.
- 4.561 Government should provide showcases and publicly funded buildings should have sustainable building elements.
- 4.562 Government should develop a comprehensive sustainable development policy that is district specific rather than adopting a blanket approach to building guidelines.

Local situations and needs should be taken into consideration in the implementation of guidelines.

***Responsiveness (Code no.: 9.1.2, 78 text units)***

- 4.563 Many suggestions, guidelines and measures are not implemented or enforced.
- 4.564 Government should be more proactive in promoting energy efficiency.
- 4.565 Government should take action against wall effect buildings, should further limit building height and density, and must not continue to ignore the urban heat island effect.
- 4.566 There should be swift implementation.
- 4.567 Implementation should be gradual with suitable grace period.

***Coordination (Code no.: 9.1.3, 25 text units)***

- 4.568 Many government policies and department practices contradict one another. Government should coordinate and resolve the differences among land policy, planning policy, building control policy, property and development policy.

***Impartiality (Code no.: 9.1.4, 26 text units)***

- 4.569 Government has turned a blind eye to developers taking advantage of the situation, resulting in high property prices and small usable area.
- 4.570 Government should prevent transfer of benefits to developers, and senior officials working for them after retirement. Granting GFA concessions for green features is a clear case of transfer of benefits to developers.
- 4.571 Big developers appear to have the advantage over smaller developers in securing land.

***Accountability and Transparency (Code no.: 9.1.5, 39 text units)***

- 4.572 There should be greater transparency regarding policy formulation and practices.

- 4.573 Government's objectives should be measurable under a transparent system.
- 4.574 The Chairman of the Town Planning Board should be elected to represent the interest of the public.

***Involve the Public (Code no.: 9.1.6, 35 text units)***

- 4.575 Government should introduce assessment within the OZP with participation from residents in the district.
- 4.576 Real partnership between Government and the general public is needed.
- 4.577 Government should conduct opinion survey of nearby residents before any large scale development, and District Councils should have the right to reject proposals from Government and private developers.

***Incentives and Penalties (Code no.: 9.1.7, 63 text units)***

- 4.578 There should be a balance between regulations, incentives and investment returns. Then, sustainability features and sustainable investment work together.
- 4.579 Government should gradually reduce incentives for podiums in building developments and should impose penalty on the inflated portion.
- 4.580 Penalties should be imposed on developers who fail to comply with minimum energy standards.

***Define Sustainable Building Design (Code no.: 9.1.8, 7 text units)***

- 4.581 Government should clearly define what constitute sustainable building designs and publicise it. It should provide some form of accreditation for buildings with sustainable features, prizes for energy efficient buildings and incentives for the wider use of facades. Tax incentives and/or reduction in land premium can also be used to promote sustainable building designs.

***Street Shadow Area (Code no.: 9.1.9, 7 text units)***

- 4.582 The use of "street shadow area" can be highly effective.

***Building Management (Code no.: 9.1.10, 5 text units)***

4.583 Government should promote better building management and set up a fund for old district improvements.

***Funding (Code no.: 9.1.11, 5 text units)***

4.584 Government should set up a fund for old district improvements.

***Other Roles of Government (Code no.: 9.1.12, 105 text units)***

4.585 Government should introduce over-riding clauses in building regulations to protect public interests. There should be legislation on specifying the calculation of saleable area and gross floor area.

4.586 The use of payback period as criterion for energy efficient installations is problematic.

4.587 Government needs to reverse the intensification policy.

4.588 Rail, as opposed to road transport, should be given priority.

4.589 Government should provide incentives for more charging stations for electric cars.

4.590 Government must reduce dependency on land premium.

4.591 “Public bikes for all” scheme should be launched.

4.592 Residential density zone definitions should be abolished.

4.593 Government should promote low-carbon initiatives, publish energy consumption guidelines, impose charges on food wastage and encourage businesses to invest in recycling.

4.594 Government should conduct studies using comprehensive regional modeling and micro-meteorological analysis.

4.595 Government should make accessible information regarding construction and demolition (C&D) wastes to contractors.

4.596 Government should designate areas for pre-cast parks.

- 4.597 Government should conduct environmental assessment itself instead of by private companies.
- 4.598 Government should not build large scale transport facilities in close proximity to residential districts.
- 4.599 Government should consider requiring micro-climate study for new buildings.
- 4.600 Government should develop an urban climate map for Hong Kong.

***Developers' Role (Code no.: 9.2, 74 text units)***

***Build Non-mandatory Features (Code no.: 9.2.1, 5 text units)***

- 4.601 Developers should work out solutions with the Town Planning Board.
- 4.602 Developers should be encouraged to include more green features, and a monitoring system should be set up to ensure that green features are properly maintained.

***Other Roles of Developers (Code no.: 9.2.2, 69 text units)***

- 4.603 Most property developers are law-abiding with running profitable business as their goals. Too much control could deter developers from investing in Hong Kong.
- 4.604 The development of a sustainable built environment should rely on market forces. Competition amongst property developers has led to improvements in building standards, including more and better amenities, etc.
- 4.605 Property developers just want to maximise the use of the site and meet the market demand.
- 4.606 Developers will respond to consumers' green needs and their willingness to pay for them.
- 4.607 The participation of developers in developments above railway stations has resulted in Hong Kong having one of the best railway systems in the world.
- 4.608 Property developers do not have any social conscience and fail to meet the requirements.
- 4.609 Property developers should consider benefits to the community as a priority and exercise their corporate social responsibility.

- 4.610 Developers should submit models for the relevant authorities to approve to avoid more wall-like buildings.
- 4.611 Interior appliances provided by developers should fulfill EEL1 standard.
- 4.612 Developers should provide more information, such as embodied energy, so that buyers can judge the value in terms of environmental protection.
- 4.613 The percentage of inflation in developments built by big developers is higher than those of small developers.
- 4.614 Minimum standards met by developers are not good standards.

***LegCo's Role (Code no.: 9.3, 5 text units)***

- 4.615 Consensus amongst members of the Legislative Council is needed.
- 4.616 Legislative measures should be the last resort.
- 4.617 Legislative measures would be more effective.

***Users' Role (Code no.: 9.4, 6 text units)***

- 4.618 Consumers are willing to pay more for sustainable building designs.
- 4.619 Benefits from concessions should be accorded to users, not just to property developers.

***Cooperation between Different Stakeholders (Code no.: 9.5, 17 text units)***

- 4.620 There should be close cooperation among different stakeholders.

## THEME 10: PUBLIC ENGAGEMENT EXERCISE PROCESS

### Categories of Views:

Comments on PE Process (Code no.: 10.1, 163 text units)

*Support for PE Exercise (Code no.: 10.1.1, 15 text units)*

*Against PE Exercise (Code no.: 10.1.2, 3 text units)*

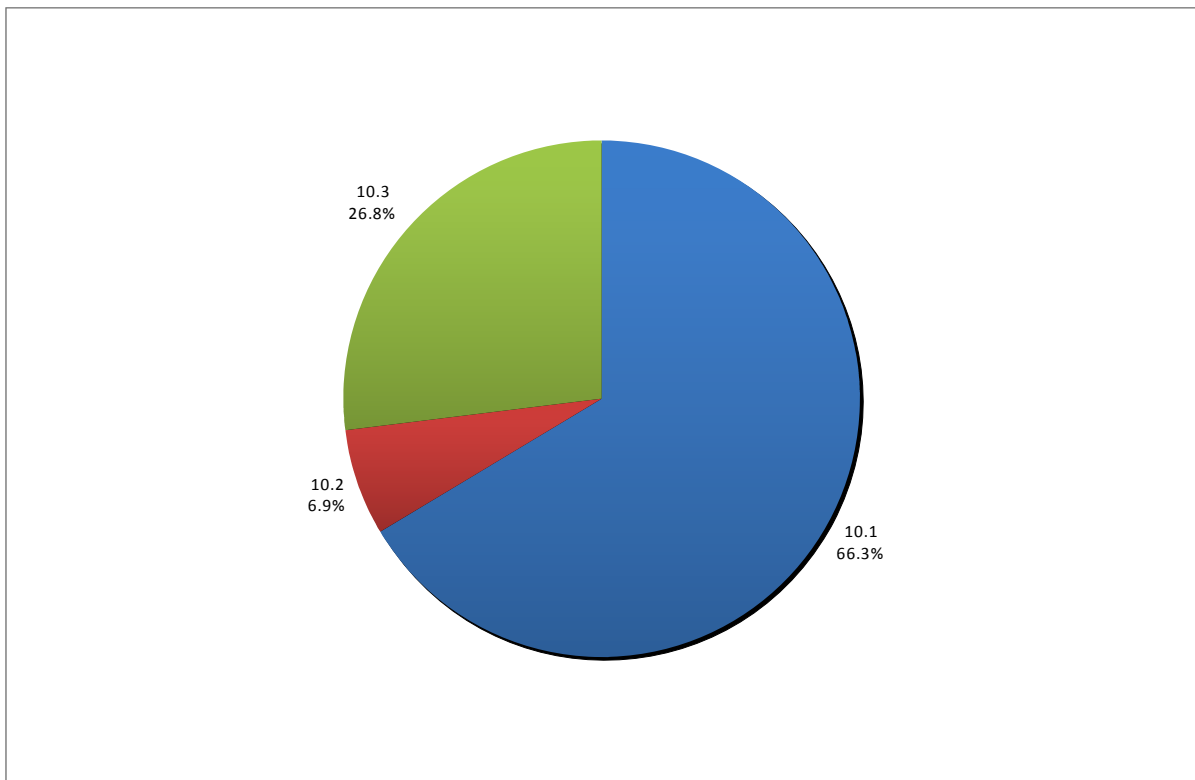
*Comments on IR Document (Code no.: 10.1.3, 118 text units)*

*Educating the Public (Code no.: 10.1.4, 22 text units)*

*Should have Clearer PE Objectives (Code no.: 10.1.5, 5 text units)*

Follow-up Actions after PE Exercise (Code no.: 10.2, 17 text units)

Other Opinions on PE Exercise (Code no.: 10.3, 66 text units)





## **SALIENT POINTS ON THEME 10: PUBLIC ENGAGEMENT EXERCISE PROCESS (246 TEXT UNITS)**

### **COMMENTS ON PE PROCESS (CODE NO.: 10.1, 163 TEXT UNITS)**

#### ***Support for PE Exercise (Code no.: 10.1.1, 15 text units)***

- 4.621 It is appropriate to raise the concerns on sustainable built environment because of the development density in Hong Kong.
- 4.622 Government's repeated efforts in trying to obtain views on sustainable built environment through public engagement are well supported.
- 4.623 The launch of the PE exercise to seek views from stakeholders on a very complex but pressing subject is welcome.
- 4.624 Although it is clear that the PE exercise is a difficult task, we still need this exercise. The society as a whole has been troubled by the problem for some time.
- 4.625 We can gain foresights from the exercise.
- 4.626 It is appropriate to have consultation at the community level.
- 4.627 The engagement exercise was initiated with sincerity by professionals as well as from the public.

#### ***Against PE Exercise (Code no.: 10.1.2, 3 text units)***

- 4.628 The existing PE exercise would invite uneducated answers.
- 4.629 The PE exercise may not address the weighting of answers from different parties properly.

#### ***Comments on IR Document (Code no.: 10.1.3, 118 text units)***

##### ***Positive Comments (3 text units)***

- 4.630 The proposals in the IR document is a product of hard work and covers the slightest details of the subject, but the contents are repetitive and there are places where readers find them difficult to digest.

- 4.631 The IR document provides valuable information and proposals that warrant public discussion.

*Negative Comments (115 text units)*

- 4.632 The IR document is incomprehensible and not user-friendly.
- 4.633 The IR document is misleading. It only goes into details on some issues while leaving out the most important problem of affordability.
- 4.634 The IR document stresses design policies and practices of private developments only, ignoring public funded buildings.
- 4.635 The IR document lacks technical data and scientific justifications. It does not provide members of the public with the economic and social costs of the options in quantifiable terms such as the devaluation of aged properties and the possible surge in land price. It does not specify the likely increase in costs to the users for sustainable options such as greenery.
- 4.636 The costs and benefits to us and our future generations must be carefully and comprehensively deliberated, and the trade-offs should be presented to the public.
- 4.637 Though many citizens have shown their concerns on the issue, the contents of IR document are too complex and difficult for the general public to understand. Hence they are unable to express their views actively.
- 4.638 The IR document is skewed, with more emphasis on new buildings – the question on whether there would be any consideration for the renovation for existing property stocks has been raised.
- 4.639 The IR document tends to over-simplify problems or issues for the benefit of layman readers.
- 4.640 The public should know that calculations about GFA concessions in the IR document are exaggerated.
- 4.641 The IR document wrongly limits the public thinking to “the design of buildings within their own site boundary” while attempting to address higher and bigger context of the “quality and sustainable built environment”.
- 4.642 Its limited contents lead the public to wrongly conceive that “GFA concessions” are the root of the problem or the only problem on the issue of building bulk and height.

- 4.643 The approach in the IR document is not progressive, and could have the unintended consequence of removing some of the current sustainable design features, resulting in a lower quality of building.
- 4.644 It over-simplifies the building “bulk and height” problem by the incorrect focus on GFA control alone.
- 4.645 It does not attempt to address all of the issues involved. Undertaking the consultation in this disjointed way may lead to unintended consequences.
- 4.646 By not questioning the current framework and approaches, the IR document in effect accepts them as the foundation for the way forward.
- 4.647 The document accepts that the benefits to the broader community derived from the current approaches are limited, but leaves the problem unaddressed.
- 4.648 Promotion of energy efficient building design is always supported but the IR document fails to provide sufficient information to draw up the target and road map in this respect.
- 4.649 The problem with the IR document is that it is framed in such a way that it does not propose major changes to the relevant policies and legislation.
- 4.650 The misinterpretation of GFA and plot ratio has been exaggerated – the confusion is magnified and confirmed in the IR document.
- 4.651 Only the phenomenon effects of the GFA concession are being presented and discussed in the IR document. The principles and rationale behind those concessions are not mentioned at all.
- 4.652 The Council should re-draft the IR document.
- 4.653 Examples of setback vs. no setback should be provided in the IR document.
- 4.654 The IR document does not mention how town planning can help solve the related problems.
- 4.655 The IR document seems to imply that it is a must to give compensation to developers in return for desired facilities.
- 4.656 The IR document should avoid using the term GFA – should use some other alternative terms.
- 4.657 The IR document focuses on many minor issues.
- 4.658 The IR document does not include issues related to saleable areas.

- 4.659 The IR document does not clearly mention the infringement on the right of private ownership in dealing with the problems.
- 4.660 The GFA exemptions that are mentioned in the IR document have many restrictions. They are not as straightforward as mentioned in the IR document.
- 4.661 The IR document lacks a holistic consideration of the three key development and building control systems of the HKSAR, namely: (a) land lease control, (b) town planning control and (c) control under the Buildings Ordinance.
- 4.662 The IR document seems to start at the wrong end of discussion – from a narrow, single building starting point, rather than an overall vision of the whole of Hong Kong as a high quality, green, low carbon living city.

***Educating the Public (Code no.: 10.1.4, 22 text units)***

- 4.663 The PE exercise should give more emphasis on educating the public and improving the awareness of environmental issues and solutions.
- 4.664 PE exercise would help promote awareness among the public and the professionals. More views should be solicited.

***Should have Clearer PE Objectives (Code no.: 10.1.5, 5 text units)***

- 4.665 The key issues and objectives of this PE should be clearly stated and put across prominently upfront in order to avoid confusion.
- 4.666 The Council could have clearly stated how to consider the issues of sustainability principles, economic returns, environmental impacts, community benefits and amenities.

**FOLLOW-UP ACTIONS AFTER PE EXERCISE (CODE NO.: 10.2, 17 TEXT UNITS)**

- 4.667 Clarification is needed as to what actions would be taken upon completion of the current PE exercise. The Council should in future produce annual reports on implementation progress and guidelines update. New features arising from this consultation could be included in a revised JPN.

- 4.668 What Hong Kong citizens are eager to see is not that the Council conveys the public views only, but that Government departments (in particular the Housing Department) vigorously formulate and enforce energy saving policies.
- 4.669 Environmentalist organisations are worried that the public engagement findings are ultimately ignored.
- 4.670 It makes sense for the Council to defer the decision for revision of operational policies until after the current PE exercise is completed.
- 4.671 The Government should formulate more in-depth proposals on the topic of quality and sustainable building design. It is hoped that the relevant departments can motivate the related parties to enact green construction style and support the environmental movement in Hong Kong.

#### **OTHER OPINIONS ON PE EXERCISE (CODE NO.: 10.3, 66 TEXT UNITS)**

- 4.672 It is suggested that District Councils should be involved in the PE exercise so as to collect views at the district level.
- 4.673 The cost of changes should be quantified. The Council should employ consultants to perform such evaluation.
- 4.674 The API (Announcement of Public Interest) over the television channel is too short and too brief.
- 4.675 It takes several calls to various Government departments before a view collection form could be obtained.
- 4.676 The effort in publicity is inadequate and well behind schedule. The Home Affairs Bureau should assist in soliciting public responses.
- 4.677 The Council should not only focus on the issues covered in the IR document and ignore other comments received through the consultation exercise.
- 4.678 The Council should take a different approach by first identifying the developments which are problematic (such as excessive height, bulk, wall effect, etc.) and then study their causes.
- 4.679 Community consultation on the OZP, ODP and layout planning process should be improved.

- 4.680 There is a need to strike a balance between the views from the public and those made by the stakeholders.
- 4.681 Many suggestions in the IR document can be enforced without the need for further consultation.
- 4.682 More weighting should be accorded to the views from the professional bodies.
- 4.683 Views from individual citizens should carry more weight.
- 4.684 We need to find a means to equate the overall built environment with value to the community and the public realm across the entire planning, development and environmental spectrum.
- 4.685 A comprehensive public consultation should be carried out to dig into the fundamental issues pertinent to the heart of the issue, such as standardised measurement of the floor areas, what areas can be sold and cannot be sold in a development, why the huge gap between the GFA allowed by the Government and the total floor area actually sold to the public and malpractices identified in the property market, etc.
- 4.686 The Council should look at different methodologies to find the most effective ones to encourage and collect public views, and to avoid the possibility that powerful groups with vested interest might “hijack” the PE exercise.
- 4.687 There is no clear definition for a sustainable building. A meaningful response should be based on a precise recognition of the issue.
- 4.688 Definitions for greenery, setback and sustainable equipment should be made clearer.
- 4.689 Discussions on built environment are usually compromises. There is no easy answer and it requires participation from all parties concerned.
- 4.690 The Council should coordinate with members of the District Councils to devise policies that protect culture and maintain the harmonious relationship between residents of the old districts.

**THEME 11: OTHER VIEWS RAISED**

**Categories of Views:**

Building Regulatory Framework (Code no.: 11.1, 251 text units)

Planning and Urban Design (Code no.: 11.2, 306 text units)

Air Quality (Code no.: 11.3, 56 text units)

Public Space (Code no.: 11.4, 32 text units)

Heat Island Effect (Code no.: 11.5, 28 text units)

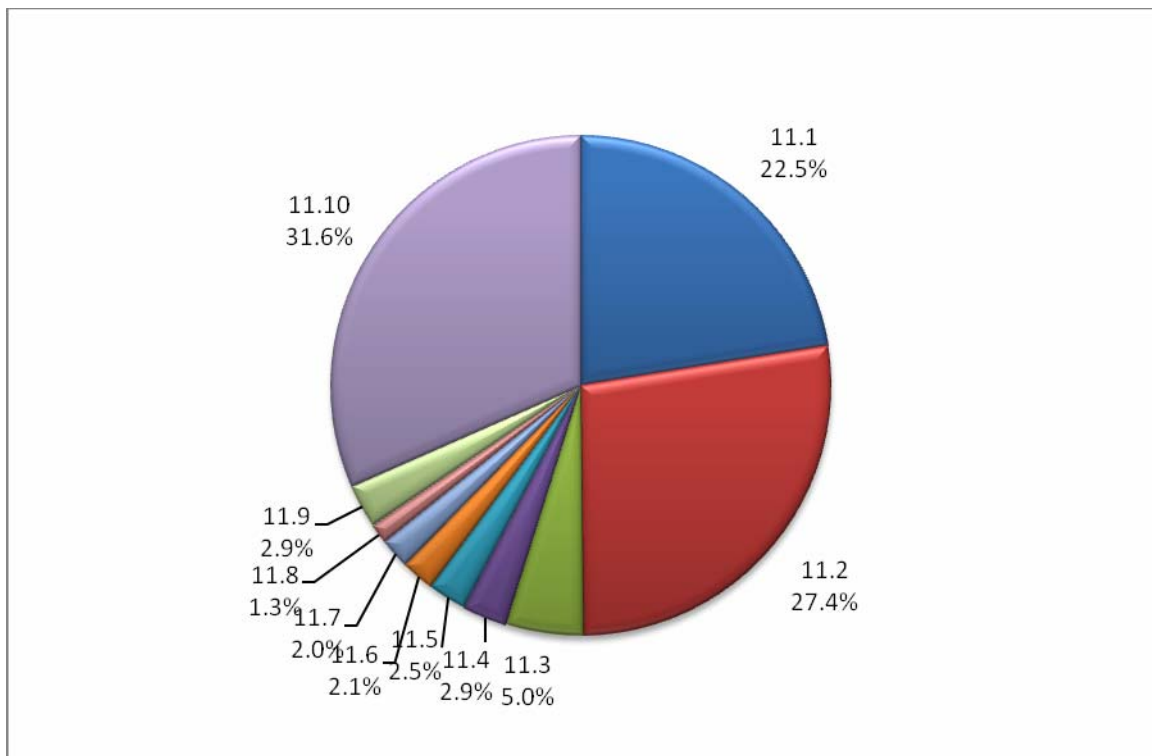
Conservation (Code no.: 11.6, 24 text units)

Long-term Livability (Code no.: 11.7, 22 text units)

Emphasis on Improving Existing Buildings (Code no.: 11.8, 14 text units)

Benchmarking Standards (Code no.: 11.9, 32 text units)

Any Other Opinions (Code no.: 11.10, 353 text units)



**SALIENT POINTS ON THEME 11: OTHER VIEWS RAISED (1,118 TEXT UNITS)**

**BUILDING REGULATORY FRAMEWORK (CODE NO.: 11.1, 251 TEXT UNITS)**

***Buildings Ordinance (Code no.: 11.1.1, 81 text units)***

- 4.691 The scope of this PE exercise should include a review of the existing Buildings Ordinance because there has been no substantial revision since 1975. The existing Buildings Ordinance lacks creativity and is far too generic for our city profile. The Buildings Ordinance is the key issue and root cause of problems.
- 4.692 Existing Government regulations which are too restrictive.
- 4.693 The suggestions in the IR Document should be included in the Buildings Ordinance.
- 4.694 The values of OTTV as stipulated in the Buildings Ordinance (Cap 123) should be reviewed to promote energy efficiency and sustainability.
- 4.695 The current building regulatory framework is adequate.
- 4.696 Sustainable building guidelines should not be related to GFA. The existing regulatory framework should be improved.

***Review of Building Regulatory Framework (Code no.: 11.1.2, 114 text units)***

- 4.697 Government should set up a committee to review these relevant issues.
- 4.698 Government should review planning standards, codes of practice, and guidelines.

***Plot Ratio (Code no.: 11.1.3, 4 text units)***

- 4.699 The IR document focuses on GFA concessions, but in fact the overall plot ratio is the crux of the matter because plot ratio determined building height and bulk.
- 4.700 Plot ratio, which is determined by the Government, is the development parameter for developers.



- 4.701 Government should review the plot ratios of new buildings, harbour front areas, and sites close to major public transport terminals.
- 4.702 The following issues relating to plot ratio should be addressed:
- (a) standardisation of the calculation of plot ratio;
  - (b) reduction in plot ratio;
  - (c) non-plot ratio countable areas (not bonus GFA);
  - (d) zoning and amalgamation of sites;
  - (e) size of the plot; and
  - (f) amendments to building regulations.

***Outline Zoning Plans (OZP) (Code no.: 11.1.4, 24 text units)***

- 4.703 The OZP issues below should be addressed:
- (a) their implementation to control developments;
  - (b) a review on the OZP and the development restriction to lower the density;
  - (c) an integrated approach with multiple levels of issues, ranging from OZP, zoning, Buildings Ordinance review, etc.
  - (d) overall landscape planning through the inclusion of Landscape Master Plan as development reference;
  - (e) the level of city planning;
  - (f) the extent of setback indicated in OZP;
  - (g) improvement on public and/or community consultation of the OZP, Outline Development Plan (ODP) and layout planning process to enable a transparent formation of the context for building design by area;
  - (h) the height and bulk restrictions set in the OZP and in the lease;
  - (i) the inclusion of appropriate specific control of individual sites into relevant statutory OZP; and
  - (j) the control imposed by the Planning Department in cooperation with the Town Planning Board so as to place appropriate restrictions on the OZP.

***Comprehensive Development Area (CDA) (Code no.: 11.1.5, 6 text units)***

- 4.704 CDA related issues should be addressed:
- (a) a system that brings all developments within the control of the Town Planning Board or at least includes prominent sites as CDA so that there is better planning control;
  - (b) certain policy for zone planning; and
  - (c) discouragement of sale items in CDA zones, in favour of proper planning of Government and the implementation of public projects.

***Transparency in Sale of Flat Units (Code no.: 11.1.6, 2 text units)***

- 4.705 Government should review the system for the regulation regarding the definition of “saleable floor area” by developers.
- 4.706 For inflated buildings, developers include public space in the selling area during price calculations. This forces the public to pay for public space and promote the increase of property prices.

**PLANNING AND URBAN DESIGN (CODE NO.: 11.2, 306 TEXT UNITS)**

***Holistic Approach to Urban Design (Code no.: 11.2.1, 155 text units)***

- 4.707 Urban design should be based on a holistic approach with the following considerations:
- (a) a holistic approach, not simply on a site by site basis, that should be adopted in planning, design, implementation, construction and maintenance;
  - (b) town, metro and/or district planning in addition to site planning before proceeding to design;
  - (c) a clear outline of development plans and timeline so that nearby residents or small businesses can make informed decisions,;

- (d) the different themes of each built environment and the surroundings of the building, community aspiration and the neighborhood as a whole;
- (e) sharing of information on urban design among different parties and avoiding separate developments of different sites without long-term planning;
- (f) broader social issues of town planning and mobility, as well as regeneration in some areas of Hong Kong;
- (g) the balance between space, economic return, complementary GFA policy, the overall benefits to the community and the improvement of overall town planning;
- (h) a dedicated department to investigate, design and plan the overall urban design during the drafting of a future blueprint for Hong Kong;
- (i) proper adjustment on policy and better planning based on scientific principles;
- (j) a macro review on the land use policy and overall design issues;
- (k) 3D town planning with the help of multi-level town plans to gauge the desirable bulk and height of the building site at the street level and to determine the limit for bulk and height; and
- (l) a master plan for HK to manage the density distribution with the completion of so many state-of-the-art infrastructure systems.

***Urban Renewal (Code no.: 11.2.2, 64 text units)***

- 4.708 The strategies of urban renewal and new town development should be covered in the scope in order to achieve a built environment that is equipped with modern culture and historical background.
- 4.709 The enhancement of building design should also be included in urban renewal or new urban design projects.

***Building Design and Flexibility (Code no.: 11.2.3, 49 text units)***

- 4.710 The scope focuses on GFA, building height and bulk but they may not be the root of the problem if advanced study of building design can be conducted.

- 4.711 Flexibility in building design and the relationship between building design and human behaviours should be studied. There are many regulations and ordinances leaving no room for innovative building design.

***Pedestrian and Street Environment (Code no.: 11.2.4, 20 text units)***

- 4.712 Pedestrians' needs should be considered.
- 4.713 Planning for good pedestrian environment should take into consideration the enhancement of visual openness, access to daylight, pollutant dispersal, air ventilation and landscape greenery and aesthetics.

***Better Landscape Planning (Code no.: 11.2.5, 9 text units)***

- 4.714 Better landscape planning is needed.

***Over-crowdiness (Code no.: 11.2.6, 4 text units)***

- 4.715 The level of crowded residential environment should be taken into consideration to avoid over-crowding in the city.

***Connectivity (Code no.: 11.2.7, 3 text units)***

- 4.716 The issue of connectivity should be covered in the scope in terms of:
- (a) linkage, connectivity and continuity of a site to a wider area framework;
  - (b) connectivity through integrating architectural design, infrastructure and transport, rather than alienating the streetscape; and
  - (c) connectivity and accessibility to the waterfront.

***Ridgeline (Code no.: 11.2.8, 2 text units)***

- 4.717 The issue of ridgeline should be covered in the scope because the construction of numerous tall buildings in mid-levels buries the ridgeline of the Peak.

### **AIR QUALITY (CODE NO.: 11.3, 56 TEXT UNITS)**

- 4.718 Improvement of air quality is needed since the outbreak of SARS (Severe Acute Respiratory Syndrome) in 2003 was due to poor air ventilation.
- 4.719 Natural ventilation in residential buildings may lead to healthier indoor environment and significant energy saving.
- 4.720 Improvement of air quality needs scientific findings instead of superficial opinions.
- 4.721 There should be studies that establish protocols to assess the effects of major planning and development proposals on external air movement for achievement of enhancing macro wind environment.
- 4.722 As a result of the Central Business District (CBD), urban shopping areas are always hotter than other areas and always have alarming levels of roadside pollutants.
- 4.723 To improve air quality, Government should reserve \$6 billion to set up a “Roadside Clean Air Fund”. The fund can be used to replace old buses that emit more carbon than new buses.
- 4.724 Air quality can be improved if high buildings are spatially placed in appropriate form.
- 4.725 If air quality of Hong Kong continues to deteriorate, more social resources would be wasted.
- 4.726 To further improve air quality of urban areas, more bicycle lanes shall be provided so as to encourage cycling instead of driving.
- 4.727 Planners may carefully select sites where old structures could be demolished and the land left undeveloped in order to proactively improve air ventilation.

### **PUBLIC SPACE (CODE NO.: 11.4, 32 TEXT UNITS)**

- 4.728 There should be more public space for the community.
- 4.729 The Government may consider using government land or public resumption to provide public open space.
- 4.730 There should be regulations to ensure the provision of social space within development projects.

- 4.731 Fragmented areas of open space are not useful for the public. More open space for leisure, greening and ventilation is needed.
- 4.732 Public space is public property. Recently, public space has been highly monitored and the “people-oriented” principle has been neglected.
- 4.733 Public space and facilities should be pluralistic and genuinely belong to the people.
- 4.734 The Government should negotiate with the developers for creating community gains through having more public space or even buy out some public space.
- 4.735 For inflated buildings, developers include public space in the selling area during price calculations. This forces the public to pay for public space and promote the increase of property prices.
- 4.736 A clearer interpretation for the term “common area” is needed. For domestic buildings, common areas should be around 25% of the total area.
- 4.737 All public spaces should be returned to the Government for management.
- 4.738 Provision of open space should be monitored by an independent body which has the power to object to any arrangements that negatively impact on the public.
- 4.739 Provision of open space should be increased to at least meet the minimum standard of 2 square metres per person. In some areas a greater provision should be achieved so as to reflect public demands for more green and recreational space.
- 4.740 Larger podium developments that lead to privatisation of public space on podium level should be discouraged.
- 4.741 There should be public parks at Hung Hom, North Point and other areas.

#### **HEAT ISLAND EFFECT (CODE NO.: 11.5, 28 TEXT UNITS)**

- 4.742 Solving heat island effects needs a holistic approach.
- 4.743 Heat island effect in Hong Kong is caused by:
- (a) global warming;
  - (b) urbanization;
  - (c) mission of absorbed heat from concrete buildings;
  - (d) blockage of air flow;

- (e) increase of temperature of urban areas; and
  - (f) the use of more energy.
- 4.744 Heat island effect can be reduced by:
- (a) building separation;
  - (b) elevation by two or three storeys for new developments;
  - (c) reduction of vehicle transportation;
  - (d) establishment of more pedestrian areas;
  - (e) reduction of number of car parks at street level; or
  - (f) increased plantation.
- 4.745 There is a trade-off between reducing heat island effect and reduction of 10% of living space for building setback, green roofs and other sustainable building initiatives.
- 4.746 There is a need to regulate the allowed or suggested properties on the street surface. In particular, there is a need to make sure that the pavement will not absorb too much heat and thus create heat islands.

#### **CONSERVATION (CODE NO.: 11.6, 24 TEXT UNITS)**

- 4.747 There should be a tree-protection ordinance.
- 4.748 The Government should preserve living trees at their original places.
- 4.749 There is a need to strengthen the existing tree preservation and management measures.
- 4.750 The ecological environment of Hong Kong should be protected.
- 4.751 Hong Kong needs a nature conservation policy.
- 4.752 Some historical sites and monument should be preserved or coordinated with modern development to give future generations the chance to appreciate them.
- 4.753 The border area which is the last green belt area of Hong Kong should be preserved.

**LONG-TERM LIVABILITY (CODE NO.: 11.7, 22 TEXT UNITS)**

- 4.754 The current generation is responsible for creating a livable city for the future generations.
- 4.755 Real development should lead to a simple life that the future generations can enjoy.
- 4.756 A vision is needed to solve the existing problems. There is a need to consider how Hong Kong would look like in 2020 and how we are going to achieve that vision.

**EMPHASIS ON IMPROVING EXISTING BUILDINGS (CODE NO.: 11.8, 14 TEXT UNITS)**

- 4.757 Both new developments and existing buildings should be considered.
- 4.758 New buildings need to co-exist with old and existing ones in terms of functions, activities, network, etc.
- 4.759 Existing buildings can be improved by renovation and preservation.
- 4.760 Both sustainability and performance of energy efficiency of existing buildings can be improved.
- 4.761 New buildings and existing buildings deserve different treatment. Property owners of existing buildings should be encouraged but not forced to install green features in their properties.
- 4.762 Discussion on sustainable built environment should not neglect physical environments and the need to adapt old buildings to a changing physical environment, changing economic and social situations, as well as changing public expectations of the role of buildings.

**BENCHMARKING STANDARDS (CODE NO.: 11.9, 32 TEXT UNITS)**

- 4.763 There should be benchmarking against standards for energy efficiency and carbon emission.
- 4.764 It is important to set up a database for benchmarking of buildings.
- 4.765 Standards such as HK-BEAM and LEED are appropriate and should be adopted.



- 4.766 The Government should request the Mass Transit Railway Corporation and Urban Renewal Authority to comply with the platinum grade of the HK-BEAM regarding energy efficiency.
- 4.767 Hong Kong should adopt the standard of OTTV.
- 4.768 The standard of technical assessment in Hong Kong should be improved. Micro-climate assessment should be conducted.
- 4.769 The Government should take into consideration more objective and regular visual impact assessment.
- 4.770 The Government should legislate on standard air ventilation assessment (AVA) for all new buildings.
- 4.771 Developers should get a certificate on AVA before any renewal or redevelopment project is conducted.
- 4.772 The Government may provide incentives such as lower stamp duty to property buyers, not to developers, for trading property with an outstanding rating in HK-BEAM.

**ANY OTHER OPINIONS (CODE NO.: 11.10, 353 TEXT UNITS)**

- 4.773 Quality buildings should not be just sustainable. They should also be functional and aesthetic in outlook.
- 4.774 The Government should ensure building materials are from legal sources.
- 4.775 While building a sustainable environment is important to our community, it is equally important for the administration to ensure the economic sustainability of any change to be implemented.
- 4.776 Hong Kong can learn from the U. K. and Taiwan. In the U. K., commercial banks would take care of small green projects and the Government would issue guarantee to those projects.
- 4.777 People-orientation should be the principle of sustainable building design. There is also a need to educate the public about the principle of people-orientation.
- 4.778 Sustainable built design features taking consideration of Hong Kong's unique social, social, geographical and environmental situations should be made mandatory as soon as practically possible.

- 4.779 More discussions on building design, quality and maintenance aspects are preferred.
- 4.780 To reduce dependency of revenue on land premium, the Government may consider allowing better access to land and development opportunities in the New Territories. The Government can learn from similar experience of New York City.
- 4.781 From the planning point of view, the Government should extend the boundary of urban areas by adequately utilising some abandoned farm land.
- 4.782 For districts where residential flats are insufficient, the Government should change the land use for areas with abandoned industrial buildings and build low-cost residential flats.
- 4.783 To maintain sustainability, Hong Kong should refrain from developing itself in the horizontal direction. Dense developments (plot ratio of 8 for domestic developments and 15 for non-domestic developments) should be maintained for core districts of urban areas.
- 4.784 The Government should impose mandatory environmental impact assessment for all large developers to protect natural light and air ventilation.
- 4.785 Every building design should take economical maintenance and management of the building into consideration and preferably allow sufficient flexibility for future adaptive re-use or modification.
- 4.786 The size of podium structures with full or large ground coverage on extensive development sites, particularly in urban areas, should be reduced.
- 4.787 Underground development should be encouraged.
- 4.788 The property owners and developers fear that the Government would apply new measures to land lots sold before the new policies come into effect.
- 4.789 The size of sites for sale by Government, MTR and the Urban Renewal Authority must be reduced to allow for a more human-scale grid of streets and public spaces.
- 4.790 Built environment is related to politics.
- 4.791 There should be a levy on waste water treatment.
- 4.792 There should be a strategy for environmental design.
- 4.793 Greenery and open space should be linked with art and culture.
- 4.794 Hong Kong has lots of innovative designs but they are usually not acceptable to some regulatory government departments based on work and traffic concerns.

- 4.795 Architects should be more creative to improve versatility of buildings.
- 4.796 While matching with the environment of the neighbourhood community and site characteristics, innovation and creativity on building design should be encouraged.
- 4.797 The quality of life in Hong Kong is unsatisfactory since Hong Kong is only ranked 70<sup>th</sup> in the world.
- 4.798 Reclamation policy should be considered when building a sustainable environment.
- 4.799 Land resources are scarce after the Government decided not to carry out reclamation in Tsuen Wan, Sham Tseng and Tseung Kwan O.
- 4.800 Reclamation policy is only a temporary relief but not the real cure. Reclamation would bring in increased economic activities, increased traffic requirements which later cause traffic congestion. Traffic congestion in turn demands more reclamation.
- 4.801 Reclaimed land should be used for plantation to improve the environment.
- 4.802 When considering sustainable built environment, competitiveness of Hong Kong should also be considered.
- 4.803 Revitalising Central would eventually raise the international competitiveness of Hong Kong.
- 4.804 To reduce the living density of urban areas, there is a need to develop currently undeveloped districts (e.g. the Lantau Island) but related accessories should be considered.

- END OF REPORT -

**ANNEX: LIST OF PUBLIC ENGAGEMENT EVENTS**

<b>No.</b>	<b>Date and Time</b>	<b>Name of Event</b>	<b>Venue</b>	<b>Estimated Number of Participants (Total 2,437)</b>
1.	8 Jul. 2009 (Wed) 7:00pm – 8:30pm	Meeting with Young Real Estate Professional of Urban Land Institute	16/F World Wide House, 19 Des Voeux Road, Central	20
2.	10 Jul. 2009 (Fri) 2:30pm – 5:00pm	1 <sup>st</sup> Engagement Session – Hong Kong Island	Sheung Wan Civic Centre, 345 Queen's Road Central	84
3.	11 Jul. 2009 (Sat) 9:00am	The Hong Kong Institute of Architects (HKIA) and Professional Green Building Council (PGBC) Forum	Meeting Room S226-227, Level 2, HKCEC, Wan Chai	157
4.	24 Jul. 2009 (Fri) 9:30am – 12:30pm	Building Sub-committee (BSC) and Authorized Persons and Registered Structural Engineers Committee (APSEC) Meeting	Room 1861, Buildings Department, Pioneer Centre, 750 Nathan Road, Mong Kok	20
5.	24 Jul. 2009 (Fri) 2:30pm – 5:00pm	2 <sup>nd</sup> Engagement Session – Kowloon West	Cheung Sha Wan Community Centre, 55 Fat Tseung Street, Cheung Sha Wan	62
6.	25 Jul. 2009 (Sat) 2:00pm – 5:00pm	Hong Kong Institute of Planners (HKIP) and The Hong Kong Institute of Landscape Architects (HKILA) Forum	The Theatre, 7/F, The Federation of Youth Groups Bldg., 21 Pak Fuk Road, Quarry Bay	80
7.	28 Jul. 2009 (Tue) 11:00am	Briefing for The Real Estate Developers Association of Hong Kong (REDA)	REDA office, Room 1403, 14/F, World Wide House, 19 Des Voeux Road, Central	40
8.	28 Jul. 2009 (Tue) 2:30pm	Presentation for Legislative Council - Panel on Development	Conference A of the LegCo Building, Central	30
9.	13 Aug. 2009 (Thu) 6:00pm – 8:00pm	Briefing for Professional Institutes (e.g. HKIA, HKIP, HKILA, HKIE, HKIS, PGBC, HKAEE and BEAM)	Business Environment Council (Auditorium), G/F, Jockey Club Environmental Building, 77 Tat Chee Avenue, Kowloon Tong	24
10.	14 Aug. 2009 (Fri) 9:05am	Town Planning Board Meeting (*open to the media)		40

Engagement Exercise on Building Design to Foster a Quality and Sustainable Built Environment

11.	18 Aug. 2009 (Tue) 2:30pm – 5:00pm	3rd Engagement Session – New Territories West	Tsuen Wan Town Hall, 72 Tai Ho Road, Tsuen Wan	49
12.	20 Aug. 2009 (Thu) 5:00pm – 6:00pm	Hong Kong Association of Energy Services Companies (HKAESCO)	The Hong Kong Productivity Council, HKPC Building, Kowloon Tong	20
13.	21 Aug. 2009 (Fri) 5:15pm	Presentation for Consumer Council Work Group on Issues Relating to Residential Property	Consumer Council's Conference Room, 22/F, K. Wah Centre, 191 Java Road, North Point	20
14.		The Hong Kong Polytechnic University (Faculty of Construction and Land Use): Open forum to involve some professionals to discuss the issues	M1603, Senate Room, Li Ka Shing Tower, The Hong Kong Polytechnic University, Hung Hom	100
15.	28 Aug. 2009 (Fri) 5:30pm – 7:00pm	Hong Kong Baptist University's Workshop	Room NAB 104, 1/F Wing Lung Bank Building for Business Studies, Shaw Campus, Kowloon Tong	30
16.	2 Sept. 2009 (Wed) 4:00pm – 5:30pm	Hong Kong General Chamber of Commerce (HKGCC) - Meet the Minister Session	Theatre, HK General Chamber of Commerce, 22/F United Centre, 95 Queensway, Admiralty	80
17.	3 Sept. 2009 (Thu) 11:00am – 1:00pm	Briefing for Urban Renewal Authority, MTRC, The Link, Hong Kong Housing Authority and Hong Kong Housing Society	Business Environment Council (Auditorium), G/F, Jockey Club Environmental Building, 77 Tat Chee Avenue, Kowloon Tong	58
18.	4 Sept. 2009 (Fri) 9:00am	Presentation for Pre-Construction Task Force	Conference Room 933, Central Government Office, West Wing, Central	30
19.	4 Sept. 2009 (Fri) 2:30pm – 5:00pm	4th Engagement Session – New Territories East	Sha Tin Town Hall, 1 Yuen Wo Road, Sha Tin	44
20.	10 Sept. 2009 (Thu) 9:30am – 11:30am	Briefing for NGOs, Green Groups and Think Tanks	Business Environment Council (Auditorium), G/F, Jockey Club Environmental Building, 77 Tat Chee Avenue, Kowloon Tong	40

Engagement Exercise on Building Design to Foster a Quality and Sustainable Built Environment

21.	12 Sept. 2009 (Sat) 9:00am – 12:00noon	The Hong Kong Institute of Surveyors (HKIS): Forum on Public Engagement on Building Design	Surveyors Learning Centre, Room 810-812, 8/F Jardine House, Connaught Place, Central	61
22.	17 Sept. 2009 (Thu) 11:30am – 12:00noon	Presentation for 18 District Council Chairmen and Vice-Chairmen	HAD Headquarters, 30/F Conference Room, Southorn Centre, 130 Hennessy Road, Wan Chai	29
23.	17 Sept. 2009 (Thu) 3:30pm – 5:00pm	A series of talks organised by Lingnan University – (b) Talk on “A Green Built Environment and A Green New Deal for Hong Kong” by Mr Albert Lai, Chairman of The Professional Commons and Vice-Chairman of Civic Party (Remarks: the 1 <sup>st</sup> talk by Professor Bernard Lim on 14 September 2009 was cancelled due to typhoon number 8)		75
24.	19 Sept. 2009 (Sat) 2:00pm – 5:30pm	Focus Group Discussion (jointly organised by Hong Kong Institute of Planners and Hong Kong Institute of Landscape Architects)	The Hong Kong Japanese Club, 18/F, 68 Yee Wo Street, Causeway Bay	40
25.	19 Sept. 2009 (Sat) 2:00pm – 5:00pm	A series of talks/workshops/site visit/forum jointly organised by Hong Kong Council for Social Services (HKCSS), St. James’ Settlement (SJS) and the 30s Group (a) 時光倒流：香港居民住屋設計的歷史變遷	St. James’ Settlement, Room D, 8/F, 85 Stone Nullah Lane, Wan Chai	26
26.		The Hong Kong Institute of Engineers: Forum for Members		100
27.	24 Sept. 2009 (Thu) 3:00pm – 5:30pm	Hong Kong Baptist University: Forum on Building Design to Foster a Quality and Sustainable Built Environment	Room WLB 103, Dr Hari Harilela Lecture Theatre, 1/F The Wing Lung Bank Building for Business Studies, Shaw Campus, Hong Kong Baptist University, Kowloon Tong	50
28.	25 Sept. 2009 (Fri) 12:30pm – 2:00pm	Hong Kong Institute of Education: Seminar on “建設美好的建築環境，由你話事” by (1) 本土行動: 朱凱迪先生 (2) Dr. Mirana Szeto, University of Hong Kong	-	20

## Engagement Exercise on Building Design to Foster a Quality and Sustainable Built Environment

29.	26 Sept. 2009 (Sat) 9:30am – 12:00noon	5 <sup>th</sup> Engagement Session – Kowloon East	Business Environment Council (Exhibition Hall), G/F, Jockey Club Environmental Building, 77 Tat Chee Avenue, Kowloon Tong	54
30.	26 Sept. 2009 (Sat) 2:00pm – 5:00pm	A series of talks/workshops/site visit/forum jointly organised by Hong Kong Council for Social Services (HKCSS), St. James' Settlement (SJS) and the 30s Group (b) 活在當下：現代港人的住屋與生活選擇		33
31.	7 Oct. 2009 (Wed) 4:30pm – 6:00pm	A series of talks organised by Lingnan University – (c) Talk on “Wall-building Effect and Sustainability (屏風樓與可持續發展)” by Mr Roy Tam, Chairman of Green Sense	MBG19, G/F, Main Building, Lingnan University, 8 Castle Peak Road, Tuen Mun	30
32.	9 Oct. 2009 (Fri) 9:30am – 11:30am	BEAM Society: Briefing for Members and Partners of Harbour Business Forum and Climate Change Business Forum organised by BEC	Business Environment Council (Auditorium), G/F, Jockey Club Environmental Building, 77 Tat Chee Avenue, Kowloon Tong	32
33.	10 Oct. 2009 (Sat) 9:00am – 1:15pm	Hong Kong Association of Energy Engineers(HKAEE)'s Public Engagement Forum for Professionals in Engineering, Building Design and Building Management on “Building Design to Foster a Quality and Sustainable Built Environment”	Hong Kong Institute of Vocational Education, Assembly Hall, Morrison Hill, No. 6 Oi Kwan Road, Wan Chai	111
34.	10 Oct. 2009 (Sat) <u>Tour</u> 10:00am – 1:00pm <u>Sharing</u> 2:00pm – 5:00pm	A series of talks/workshops/site visit/forum jointly organised by Hong Kong Council for Social Services (HKCSS), St. James' Settlement (SJS) and the 30s Group (c) 尋找理想居所「另類睇樓團」	St. James' Settlement, AV Room, 7/F, 85 Stone Nullah Lane, Wan Chai	33
35.	10 Oct. 2009 (Sat) 1:30pm – 6:00pm	Professional Green Building Council: Tour 1: half-day tour for teachers and students to selected award winning green buildings in HK Island		44

36.	13 Oct. 2009 (Tue) 2:30pm – 4:30pm	Briefing for District Councillors and Property-related institutes	Business Environment Council (Auditorium), G/F, Jockey Club Environmental Building, 77 Tat Chee Avenue, Kowloon Tong	12
37.	16 Oct. 2009 (Fri) 6:00pm – 10:00pm	The Open University of HK: Debate Competition	P01, Serena Yang Lecture Theatre, The Open University of Hong Kong, Ho Man Tin	50
38.	17 Oct. 2009 (Sat) 10:30am – 11:30am	Hong Kong Housing Society: Two tours for members of HK 200 Association and undergraduates	Moon Lok Dai Ha (滿樂大廈), 141 – 169 Sha Tsui Road, Tsuen Wan	31
39.	17 Oct. 2009 (Sat) 10:00am – 12:30pm	Forum on “City Speak VII: Livable Density”	The Fringe Club, 2 Lower Albert Road, Central	150
40.	17 Oct. 2009 (Sat) 1:30pm – 6:00pm	Professional Green Building Council: Tour 2: half-day tour for teachers and students to selected award winning green buildings in Kowloon	<u>Tour 2: Kowloon East Route</u> The Hong Kong Polytechnic University – Hong Kong Community College (Hung Hom Bay) > Upper Ngau Tau Kok Estate > Kowloon Hotel, Tsim Sha Tsui	30
41.	19 Oct. 2009 (Mon) 10:00am – 12:00noon	Briefing for Government Departments - ArchSD, BD, EMSD, LandsD, PlanD, THB(HD) and THB (TD)	5/F Auditorium, North Point Government Offices, 33 Java Road, North Point	126
42.	19 Oct. 2009 (Mon) 6:30pm	Presentation for Project Chambers	Hong Kong Club, No. 1 Jackson Road, Central	14
43.	21 Oct. 2009 (Wed) 10:45am – 12:45pm	Briefing for Planning Department	Room 526, 5/F., North Point Government Offices, 33 Java Road, North Point	80
44.	31 Oct. 2009 (Sat) 2:00pm – 6:00pm	A series of talks/workshops/site visit/forum jointly organised by Hong Kong Council for Social Services (HKCSS), St. James’ Settlement (SJS) and the 30s Group (d) 公開論壇：可居的生活環境及『一人一故事劇場』	Chater Garden, Central	61
45.	9 Nov. 2009 (Mon) 4:30pm – 6:30pm	Briefing for Lands and Development Advisory Committee (LDAC)		23



46.	14 Nov. 2009 (Sat) 9:30am – 12:00noon	Forum on “Harmonized Neighbourhood” (organised by the School of Architecture, the Chinese University of Hong Kong)	Central Courtyard, Jockey Club Creative Arts Centre (JCCAC), 30 Pak tin Street, Shek Kip Mei	46
47.	14 Nov. 2009 (Sat) 2:00pm – 4:30pm	Sustainable Building Design Competition - Final assessment of entries and award presentation ceremony for the Forum on “Harmonized Neighbourhood” co- organised by the School of Architecture, the Chinese University of Hong Kong and Centre of Architectural Research for Education, Elderly, Environment and Excellence (CARE)	Central Courtyard, Jockey Club Creative Arts Centre (JCCAC), 30 Pak Tin Street, Shek Kip Mei	48