



**Public Engagement Exercise of the Council for Sustainable Development on
*Combating Climate Change:***

Energy Saving and Carbon Emission Reduction in Buildings

**INDEPENDENT ANALYSIS AND REPORTING AGENCY'S
FINAL REPORT**

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Table of Contents

| | | |
|------------|--|-----|
| Chapter 1 | EXECUTIVE SUMMARY | 1 |
| Chapter 2 | INTRODUCTION | 7 |
| 2.1 | BACKGROUND | 7 |
| 2.2 | OBJECTIVES..... | 8 |
| Chapter 3 | METHODOLOGY | 9 |
| 3.1 | DATA SOURCES | 9 |
| 3.2 | THEORETICAL FRAMEWORK..... | 14 |
| 3.3 | CODING METHOD ANALYSIS..... | 16 |
| Chapter 4 | FINDINGS..... | 20 |
| 4.1 | SUMMARY OF VIEWS COLLECTED | 22 |
| | SYSTEMIC ENHANCEMENT..... | 29 |
| | FACILITATION OF BEHAVIOUR CHANGE | 31 |
| 4.2 | QUANTITATIVE AND QUALITATIVE ANALYSIS | 34 |
| | CLIMATE CHANGE AND YOU | 34 |
| | SYSTEMIC ENHANCEMENT..... | 35 |
| | FACILITATION OF BEHAVIOUR CHANGE | 44 |
| 4.3 | OTHER VIEWS | 52 |
| Chapter 5 | CONCLUDING REMARKS..... | 54 |
| Appendix 1 | LIST OF ENGAGEMENT AND PUBLICITY EVENTS..... | 55 |
| Appendix 2 | QUESTIONS FOR REGIONAL FORUM AND VIEWS COLLECTION FORMS (VCFs) | 58 |
| Appendix 3 | LIST OF PROFILE CLASSIFICATIONS | 64 |
| Appendix 4 | SUMMARY OF RESPONSES TO CLOSE-ENDED QUESTIONS | 67 |
| Appendix 5 | THE NUMBER OF TEXT UNITS FOR EACH ISSUE..... | 74 |
| Appendix 6 | QUOTES OF VIEWS..... | 87 |
| | REFERENCES | 111 |

LIST OF FIGURES AND TABLES

| | | |
|-----------|---|----|
| Figure 1. | The Cognitive Model..... | 15 |
| Figure 2. | The Data Coding Scheme for Analysis..... | 17 |
| Figure 3. | Steps of the Coding Scheme Development..... | 19 |
| Figure 4. | Total Number of Text Units by Issue..... | 23 |
| Table 1. | Overall Statistics for the Public Engagement Exercise..... | 10 |
| Table 2. | Profile Classification by Data Source..... | 13 |
| Table 3. | Distribution of the Total Number of Text Units by Issue..... | 24 |
| Table 4a. | Overall Distribution of the Average Number of Text Units by Data Source and Issue (Part 1 – Systemic Enhancement) | 27 |
| Table 4b. | Overall Distribution of the Average Number of Text Units by Data Source and Issue (Part 2 – Facilitation of Behaviour Change)..... | 28 |

LIST OF ABBREVIATIONS

| | |
|-------------|---|
| BEC | Building Energy Code |
| BEAM | Building Environmental Assessment Method |
| EMSD | Electrical and Mechanical Services Department |
| EMS | Energy Efficiency Management System |
| EPD | Environmental Protection Department |
| HAB | Home Affairs Bureau |
| IRA | Independent Analysis and Reporting Agency |
| IR document | Invitation for Response document |
| MEELS | Mandatory Energy Efficiency Labelling Scheme |
| OSL | Office of Service-Learning |
| PD | Programme Director |
| SDC | Council for Sustainable Development |
| TU | Text Unit |
| VCFs | Views Collection Forms |
| VEELS | Voluntary Energy Efficiency Labelling Scheme |

Chapter 1 EXECUTIVE SUMMARY

- 1.0.1 The public engagement exercise “Combating Climate Change: Energy Saving and Carbon Emission Reduction in Buildings” was conducted by the Council for Sustainable Development (SDC) from August to December 2011. The exercise aimed at engaging stakeholders and the community in combating climate change through raising public awareness on energy conservation and to gather suggestions for reducing carbon intensity. The Kadoorie Institute of the University of Hong Kong was commissioned as the Programme Director (PD), while the Office of Service-Learning (OSL) of Lingnan University was appointed as the Independent Analysis and Reporting Agency (IRA) charged with the responsibility to objectively analyse the public’s views collected during the four-month public involvement phase of the public engagement process.
- 1.0.2 Throughout the whole public engagement exercise, a total of 6,651 records were collected from the general public. This included (a) 343 pieces of oral records collected from twenty-eight public engagement events (including five regional forums, one mini forum and twenty-two other engagement events), and (b) 6,308 records collected from three major written submissions channels (including 4,689 records from mail, fax and email; 1,592 Views Collection Forms (VCFs); and 27 records from the SDC online discussion forum and the Home Affairs Bureau’s (HAB’s) Public Affairs Forum).
- 1.0.3 Both qualitative and quantitative research methods were employed according to nature of the questions. In the case of qualitative analysis, each and every piece of the records was analysed word by word, coded as a “text unit,” and categorised into different sub-categories according to a coding scheme that was developed. The Code-Based Approach was used to work on the content analysis with the views collected being broken down into specific recording units and then categorised into three major themes—perceptions, concerns, and suggestions—under the Cognitive Model. The coding scheme was consistently reassessed by different coders to foster accuracy and reliability from the “Basic Code Scheme” to “Finalised Issue Code.” A total of 20,137 text units were extracted and grouped under twelve areas, i.e. ‘climate change and you’ along with the eleven issues from the Invitation for Response (IR) document, and three categories, i.e. perceptions, concerns, and suggestions. Among the eleven issues and other views, the top two issues with the most text units are ‘reviewing the electricity tariff structure’ and ‘exploring the extension of the application of the Mandatory Energy Efficiency Labelling Scheme (MEELS).’

1.0.4 This final report provides an overall description of the public's views on the eleven issues proposed in the IR document along with the details of the quantitative and qualitative analyses for each of the issues.

Tightening the Building Energy Code (BEC)

1.0.5 For the proposed issues of systemic enhancement, the collected views reflected that the Building Energy Code (BEC) should be tightened due to the fact that it helped reduce their energy consumption and carbon emissions hence minimising negative impacts on the environment and enabling respondents to save money.

1.0.6 There were also some views that the existing standards of the BEC should be reviewed at regular intervals in order to maintain the standards in step with global practices, technological advancement, and new data and information. Research should be conducted with justification and adequate consultation with the industry on the details of the standards including a clear road map and time frame for implementation.

Providing Recognition for Energy-Efficient Buildings

1.0.7 Regarding whether to provide recognition for high energy-efficient buildings, respondents suggested utilising an award and labelling scheme such as the Building Environmental Assessment Method (BEAM) Plus certification system accredited by the Hong Kong Green Building Council since it already existed along with implementing more promotion and education on the existing award scheme.

1.0.8 Energy-efficient buildings should be recognised in order to help encourage developers to develop energy-efficient buildings and increase the buildings' leasing and resale values and increase transparency as well. Some respondents mentioned providing recognition could drive more competition in the market and achieve higher levels of energy efficiency.

Exploring the Extension of the Application of the Mandatory Energy Efficiency Labeling Scheme (MEELS)

1.0.9 Collected views showed that the respondents were concerned about how to compare the information provided on the labels of different products of different grades and whether the money they saved could offset the higher purchase price.

1.0.10 Respondents also expressed that the price was just one of the aspects of the purchasing decision; other factors such as function, style and brand were also important.

1.0.11 Respondents suggested the Government should periodically review the existing MEELS in order to make sure the existing scheme was updated. Some respondents considered that more education should be provided to the public by the Government in order to enhance their awareness of MEELS.

Tightening Up the Energy Efficiency Grading Levels for Room Air Conditioners and Refrigerators under the Mandatory Energy Efficiency Labeling Scheme (MEELS)

1.0.12 Some respondents commented that before tightening the existing grading levels for room air conditioners and refrigerators under the MEELS, the Government should provide education and promotion to the general public on the existing energy efficiency grading level of MEELS. Comprehensive reviews on the existing grading levels should be completed to measure the understanding of the general public regarding the details of MEELS. Some respondents agreed that the grading levels should also be reviewed regularly in order to keep pace with international standards and the latest technological advancements.

Phasing Out Energy-Inefficient Incandescent Light Bulbs

1.0.13 There were differing views on restricting energy-inefficient incandescent light bulbs. Some considered that it should be implemented gradually. A comprehensive recycling system should be considered and appropriate regulation and legislation was needed. The respondents suggested the Government should provide educational programs to simultaneously inform the public of the beginning of the transition to energy-efficient light bulbs and the benefit of using them.

1.0.14 On the other hand, some respondents disagreed with restricting the supply of energy-inefficient incandescent light bulbs. Affordability was one of the main concerns from the respondents since low-income families would not be able to adopt the energy-efficient light bulbs as they were more expensive than the incandescent light bulbs in general.

1.0.15 Availability of sufficient choices should be thoroughly assessed as well, since restricting the supply of energy-inefficient incandescent light bulbs would consequently limit market choices. Lighting fixtures such as crystal lighting fixtures could not easily accommodate energy-efficient light bulbs both in terms of the materials used and aesthetic appearance.

Phasing Out Energy-Inefficient Electrical Installations/Appliances

1.0.16 Respondents' concerns about phasing out energy-inefficient electrical installations/appliances and imposing minimum energy performance standards were quite

similar to the concerns raised about phasing out energy-inefficient incandescent light bulbs. Respondents were worried about limiting consumer choices and that low-income families would not be able to afford energy-efficient electrical installations/appliances, and the problem related to disposing of inefficient appliances.

1.0.17 Some respondents suggested that the Government should provide more information to the public on the availability of more efficient alternatives and the effectiveness of them. Others suggested that research should be undertaken by independent organisations to identify grossly inefficient installations and appliances.

Energy/Carbon Audit

1.0.18 With regard to the proposed issue of facilitation of behaviour change, since the energy/carbon audits were still not popular and widely adopted in Hong Kong, the respondents suggested the Government should first take the lead in practicing low carbon management by requiring all departments, educational institutes and other facilities to conduct regular energy/carbon audits, report the results, and, where appropriate, set reduction targets in order to serve as a role model to the public. Some suggested large corporations and listed companies should take the lead in this regard.

1.0.19 Some respondents were concerned that there was a lack of understanding of energy/carbon audits; such as confusion over the terms “energy audit” and “carbon audit”. They were not sure about the differences and similarities between them. Also, one of the concerns raised by the respondents was that there were a number of free carbon calculation tools, but they were not widely used.

Better Understanding of Your Energy Consumption

1.0.20 In general, respondents suggested more information should be included in their electricity bills and the types of information should be presented in a simple and easy-to-read manner so that they could grasp the meaning easily at first glance like a bar chart or pie chart or in table form, which could show the details of energy consumption and the amount paid.

1.0.21 Some respondents suggested printing green tips and slogans such as “Save Energy, Save Money” in order to increase awareness of the need to reduce energy consumption. Some suggested that energy consumption trends be presented in an encouraging and discouraging way like a warning message in red could be printed on the electricity bill if there was an increasing trend of energy consumption compared to the previous month, and complimentary words could encourage households that reduced energy consumption.

1.0.22 It was further suggested that a breakdown of energy consumption should be shown such as peak hour/daily/monthly/annual electricity consumption as well as the amount paid per capita and per square-meter/foot. Benchmarks by average household size should be shown for both energy consumption and the amount paid.

Using Energy Efficiency Management System (EMS)

1.0.23 Respondents considered that proper advertising and promotion were needed to promote the adoption of EMS, such as through billboards and television ads. Also, it was suggested that the benefits of adopting EMS should be promoted with concrete examples and data in order to increase awareness among building management teams. Seminars and workshops could be arranged in order to further enhance building managers' knowledge and skills in terms of the benefits and costs of adopting EMS.

1.0.24 Some suggested that a review and assessment of existing building design and structure could help promote the adoption of EMS by having a better design and implementation of the energy saving system for various types of the buildings.

Promoting the Adoption of Energy-Efficient Electrical Appliances among the Trades

1.0.25 Respondents suggested that the Government should encourage investments in research and development for energy-efficient electrical appliances through various funding schemes as it was not purely for the benefit of energy saving but also served as an incentive for innovation in other areas as well in the future.

1.0.26 It was also suggested that the Government should step up publicity and dissemination of information on energy-efficient electrical appliances to enhance awareness and make more choices available for local trade use.

Reviewing the Electricity Tariff Structure

1.0.27 There was no apparent consensus on which tariff structure should be adopted. Some respondents suggested that the progressive tariff structure should be adopted and some criticised the regressive tariff structure because it actually facilitated higher energy consumption. A few respondents mentioned the progressive tariff structure should be based on energy efficiency or energy intensity (e.g. per square foot) instead of the total amount of energy consumption since some bulk users consumed more energy than others, but their consumption might be more efficient as well.

1.0.28 It was suggested that education on the existing tariff structure and the costs and benefits of other tariff structures should be provided by the Government. Some respondents suggested reviewing the incentives and assistance provided by the Government such as tax and rate reductions for users with high energy efficiency.

Other Views

1.0.29 Besides the eleven issues in the IR document, some respondents also commented on other related issues, such as enhancing the public's awareness by providing more education and promotion to further raise awareness of the problems related to climate change. Some considered that education and promotion on the reasons and methods of systemic enhancement as well as adopting measures that facilitate behaviour change plays an important role in combating climate change.

1.0.30 Some respondents commented that in order to reduce energy consumption effectively, the regulation of signboards was necessary. They further elaborated that the public would consume less electricity for air-conditioning if there was less heat generated by such signboards outside their buildings. Commercial lighting systems such as billboards, decoration lighting or display spotlights should be turned off after certain hours at night, except those used for safety or security reasons. Also, some respondents suggested financial penalties be imposed for violations. Any money received from the penalty could be deposited into environmental fund.

Chapter 2 INTRODUCTION

2.1 BACKGROUND

- 2.1.1 The Council for Sustainable Development (SDC) held the public engagement exercise “*Combating Climate Change: Energy Saving and Carbon Emissions Reduction in Buildings*” from August 5, 2011 to December 4, 2011 to collect the views of the community and stakeholders on their perceptions, concerns, incentives, and potential action plans for demand-side management of energy consumption and reducing carbon intensity.
- 2.1.2 The main target groups of the exercise were four core building user groups representing both the residential and commercial sectors, including households (e.g. Housing Authority, Housing Society, owners’ corporations, property management companies), office (e.g. chambers of commerce, trade organisations, government departments, and property management companies in office buildings), retail (e.g. retail shops, service outlets, shopping complexes), and catering (e.g. restaurants, fast-food stores).
- 2.1.3 The public engagement exercise included five regional forums, one mini forum and twenty-two engagement events organised with supporting organisations, public advisory bodies and major stakeholders and a series of publicity programmes, such as school talks at different secondary schools. For these events, different versions of the Views Collection Forms (VCFs) were distributed to collect written comments from the community. The Internet was also used to collect views in the form of emails and from some online forums.
- 2.1.4 The Office of Service-Learning (OSL), Lingnan University was commissioned as the Independent Analysis and Reporting Agency (IRA) charged with the responsibility to objectively analyse the public’s views collected during the four-month public involvement phase of the public engagement process.
- 2.1.5 This final report provides a description of data sources and an overview analysis of public views collected from different engagement events throughout the public involvement phase from August 5, 2011 to December 4, 2011, including written submissions received up to the extended cut-off date of December 9, 2011. It provides a comprehensive analysis based on the eleven issues covered in the IR document. A general perception of the public was identified and the details are described in Chapter 4 in order to fulfill the objectives of the public engagement exercise stated in Section 2.2.

2.2 OBJECTIVES

2.2.1 The objectives of this public engagement process are as follows:

- (1) to engage the major user groups and the general public in the issues related to combating climate change and to inspire, promote, and facilitate user groups in devising action plans/response strategies and/or taking action;
- (2) to facilitate an exchange of ideas on barriers (e.g. cost, technical hurdles, etc.), incentives and assistance provided for overcoming the barriers, and the measures that might be adopted to mitigate the effects of climate change;
- (3) to educate and inform the public about climate change, its cause(s), and its impacts on our lives; to invoke a reflection on our current lifestyles and consumption patterns; and
- (4) to enable the SDC to report to the Government with possible ways to facilitate efforts in combating climate change.

Chapter 3 **METHODOLOGY**

3.1 DATA SOURCES

3.1.1 The public engagement exercise was officially launched on August 5, 2011 and closed on December 4, 2011¹. There were a total of 6,651 records collected throughout the whole engagement exercise including 279 oral records from five public regional forums held in Shatin, Causeway Bay, Mong Kok, Tsuen Wan and Kwun Tong; 42 oral records from a mini forum held at the Open University of Hong Kong; and 22 oral records of engagement events including briefings and meetings that were held with various supporting organisations, public advisory bodies and major stakeholders. 6,308 written submissions were received via different sources, including 4,689 records received by mail, fax and email; 1,592 views collection forms (VCFs); and 27 online posts at the Council for Sustainable Development's (SDC) online discussion forum and Home Affairs Bureau's (HAB) Public Affairs Forum. Table 1 shows the detailed breakdown of the data sources from the engagement exercise.

¹ The engagement officially closed on December 4, 2011, but submissions received up to December 9, 2011 had also been taken into account.

Overall Statistics

Table 1. Overall Statistics for the Public Engagement Exercise

| Items | Data Sources | Number / (%) of Records | |
|---------------|--|--|-------------------|
| 1. | Oral Records of Engagement Events: | | |
| (a) | 5 Regional Forums ¹ | 279 (4.19%) | |
| (b) | 1 Mini Forum ² | 42 (0.63%) | |
| (c) | 22 Other Engagement Events ³ | 22 (0.33%) | |
| | | 343 (5.15%) | |
| 2. | Written Submissions: | | |
| (a) | Mail, Fax and Email | Individual | 92 (1.38%) |
| | | Organisations ⁴ | 31 (0.47%) |
| | | Mass Identical Emails ⁵ | 933 (14.03%) |
| | | Mass Submissions under the Same Title ⁶ | 3,633 (54.62%) |
| | | 4,689 (70.5%) | |
| (b) | Views Collection Forms (VCFs) | Individual | 1,582 (23.79%) |
| | | Organisations | 10 (0.15%) |
| | | 1,592 (23.94%) | |
| (c) | Council for Sustainable Development (SDC)'s Online Discussion Forum & Home Affairs Bureau (HAB)'s Public Affairs Forum | 27 (0.41%) | |
| Total: | | 6,651 (100%) | |

¹ The five regional forums were held in different districts and were attended by the general public. They took place at Shatin Town Hall, Leighton Hill Community Hall, Mong Kok Community Hall, Tsuen Wan Town Hall and Sai Tso Wan Neighborhood Community Centre.

² The mini forum was held at the Open University of Hong Kong, with students being trained as facilitators.

³ Other engagement events include twenty-two school talks, public briefings, and other meetings.

⁴ The engagement officially closed on December 4, 2011, but submissions received up to December 9, 2011 have also been taken into account.

⁵ Refers to the identical email template supporting the electricity tariff structure.

⁶ Refers to the street survey conducted by Greenpeace using a template to collect views on the electricity tariff structure.

3.1.2 Table 1 shows the distribution of all the data sources in this engagement exercise. Almost 70% of the data sources were from mass written street surveys and mass written identical emails. The total number of written VCFs contributed around 24 % of the total data sources. Data sources such as online forum posts and the oral records of the mini forum comprised less than 1% of the total.

General Descriptions

3.1.3 The following sections include detailed descriptions for each data source.

Oral Records of Engagement Events

3.1.4 A total of 343 oral records were collected from this engagement exercise including 279 records from five regional forums, 42 records from one mini forum and 22 records from other engagement events. A set of open- and close-ended questions based on eleven issues were asked by facilitators throughout the regional and mini forums. Oral records of other engagement events included meetings with different stakeholders and only the comments collected from Questions and Answers (Q&A) sessions of the events were recorded as the data sources. Details of all the oral records from the various engagement events and the set of questions used in the forums are listed in Appendices 1 and 2 respectively.

Written Submissions

3.1.5 A total of 6,308 written submissions were collected from three different data sources, including submissions by mail, fax and email; VCFs; and at the SDC's online discussion forum and HAB's Public Affairs Forum. Among the 4,689 submissions by mail, fax and email, 92 of them were from individuals and 31 from organisations. There were a total of 933 mass identical emails received with the exact same content and wording; 3,633 mass records of written street surveys were received as well². Both mass submissions were regarding the same issue proposed in the IR document. Details are included in a later section of this report. Unlike the VCFs, there was no specific set of questions distributed for the respondents to answer though some questions were listed in the IR document.

3.1.6 There were a total of 1,592 VCFs received for this engagement exercise, including 1,582 from individuals and 10 from organisations. The VCFs were received through four different channels, including 79 forms from regional forums, 20 forms from mini-forum, 1,461 forms from public education and publicity events³, and 32 forms via mail, fax and email. Among the 1,592 VCFs received from the engagement exercise, 1,355 were simplified VCFs, and 237 were original VCFs. Simplified VCFs were designed to be simpler in terms of the wording for students and elders. Original VCFs were the same as the questions in the IR document. Questions for original and simplified VCFs are listed in Appendix 2.

² The 3,633 massive surveys were distributed online or the street by Greenpeace Hong Kong since November 2011.

³ The detailed list is shown in Appendix 1.

3.1.7 27 written submissions were collected from the SDC online discussion forum and HAB's Public Affairs Forum. Similar to the records collected by mail, fax and email, there was no specific set of questions distributed for the respondents as the respondents were asked to freely provide their views regarding the eleven issues proposed in the IR document.

Profile Classifications

3.1.8 In this section, overall profile classifications for the respondents are shown along with the classifications by each individual data source. Six profile groups were classified, and a detailed list of the profile groups is shown in Appendix 3.

3.1.9 Table 2 shows the distribution of the profile classification of the participants across six different data sources, including three oral data sources and three written data sources. More than 23% of the respondents from all data sources were from the education sector including secondary and tertiary schools. Around 73% was contributed by the general public, which represented the individuals not affiliated with any of the other groups. Public authorities and related organisations contributed less than 1%, while respondents with backgrounds in non-government organisations, professional organisations, think tanks, and business organisations comprised together around 3% of the total number of respondents⁴.

⁴ Refers to the list of the Supporting Organisations in the IR document.

Table 2. Profile Classifications by Data Source

| Groups* Data Sources | | Public Authorities & Related Organisations | Non-Government Organisations | Education Sector | Professional Organisations & Think Tanks | Business Organisations | General Public | Total No./ (%) of views collected (By data sources) |
|-------------------------|---|--|------------------------------|-----------------------|--|------------------------|-----------------------|---|
| 1 | Oral Records of Engagement Events: | | | | | | | |
| (a) | Regional Forums | 27 | 37 | 89 | 12 | 42 | 72 | 279 (4.19%) |
| (b) | Mini Forum | N/A | N/A | 42 | N/A | N/A | N/A | 42 (0.63%) |
| (c) | Other Engagement Events | 7 | 1 | 4 | 3 | 6 | 1 | 22 (0.33%) |
| 2 | Written Submissions: | | | | | | | |
| (a) | Mail, Fax and Email | 1 | 7 | 7 | 9 | 13 | 4,652** | 4,689 (70.50%) |
| (b) | Views Collection Forms (VCFs) | 1 | 21 | 1,401 | 43 | 11 | 115 | 1,592 (23.94%) |
| | <i>i) VCFs (Original)</i> | 1 | 21 | 113 | 43 | 11 | 48 | 237 (3.56%) |
| | <i>ii) VCFs (Simplified – School talks)</i> | N/A | N/A | 1,288 | N/A | N/A | N/A | 1,288 (19.37%) |
| | <i>iii) VCFs (Simplified - Elderly)</i> | N/A | N/A | N/A | N/A | N/A | 67 | 67 (1.01%) |
| (c) | Online Forums (SDC & HAB) | N/A | N/A | N/A | N/A | N/A | 27 | 27 (0.41%) |
| | Total No. / (%) of views collected (By Groups) | 36 (0.54%) | 66 (1.00%) | 1,543 (23.20%) | 67 (1.00%) | 72 (1.08%) | 4,867 (73.18%) | 6,651 (100%) |

*Note: Refers to the list of the Supporting Organisations in the IR document.

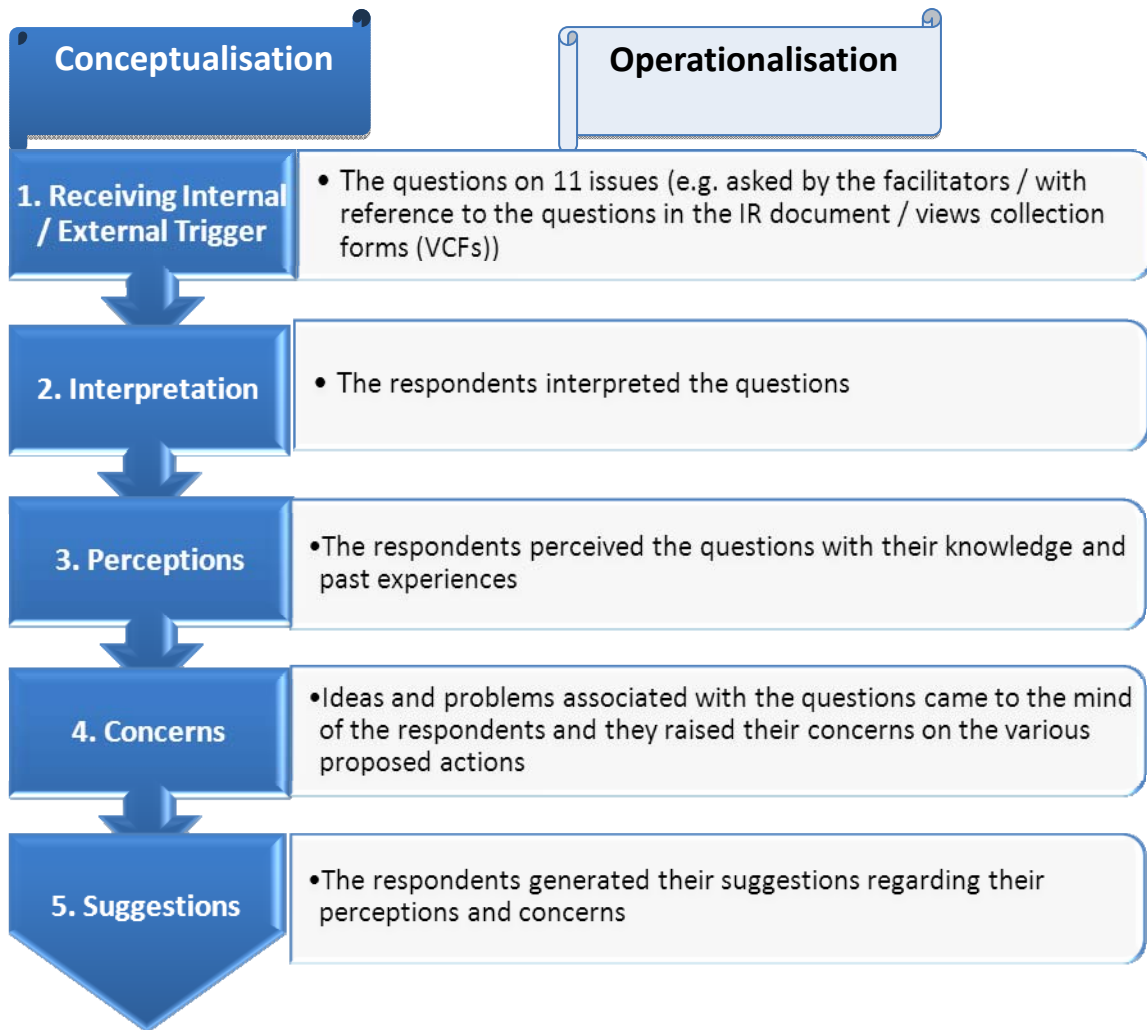
** Note: The 933 mass identical emails and 3,633 mass submissions of the street survey commented only on the Issue of “reviewing the electricity tariff structure.”

3.1.10 Besides the general profile classification distribution, Table 2 also demonstrates the diversity of respondents’ profiles by source of submission. Some data sources have a wide diversity of respondent profiles such as the regional forums, submissions by mail, fax and email, and other engagement events. However, for example the mini forum was held only for tertiary education students, and simplified VCFs were mostly submitted by secondary school students.

3.2 THEORETICAL FRAMEWORK

- 3.2.1 To have a better understanding of the participants' responses, expressions, and opinions on particular issues, we adopted a general cognitive model to guide us in our analysis of the information processing that went on inside participants' minds and framed their way of thinking (Beck and Emery, 1995). The cognitive model has five different stages to interpret participants' cognition on each issue. In the first stage, participants receive internal or external triggers. Then, the respondents interpret the information through the process of thought. Afterward, they perceive the triggers in the way according to their knowledge and past experiences ("perceptions"). Ideas or problems then come into their minds based on the perceptions they have and enhance creating concerns over the triggers ("concerns"). Finally, they generate suggestions or actions to further sustain or improve the triggers ("suggestions").
- 3.2.2 Figure 1 below shows the five conceptualisation stages of the cognitive model together with the five operationalisation stages of the cognitive model that this final report adopted. In the first two steps, the respondents interpreted the questions on the eleven issues that were asked by the facilitators at the regional and mini forums or with reference to the questions in the IR document. The questions were also from the VCFs that were distributed to the participants at the regional and mini forums or other engagement events. The third step is the perceptions of the respondents on the questions with their knowledge and past experiences, followed by the next step that the respondents expressed their ideas and raised their concerns associated with the eleven issues. In the last stage, the respondents generated their suggestions regarding their perceptions and concerns.

Figure 1. The Cognitive Model



3.2.3 This report employed a code-based approach (Krippendorff, 1980; Weber, 1990) that adopted the content analysis method based upon the responses to the questions received from the data sources in order to provide a systematic assessment of views from different data sources. Stemler (2001) emphasised that content analysis provides an empirical basis for monitoring shifts in public opinion. It is also an ideal method to analyse the oral and written records from different sources. The detailed coding method and steps are discussed in Section 3.3.

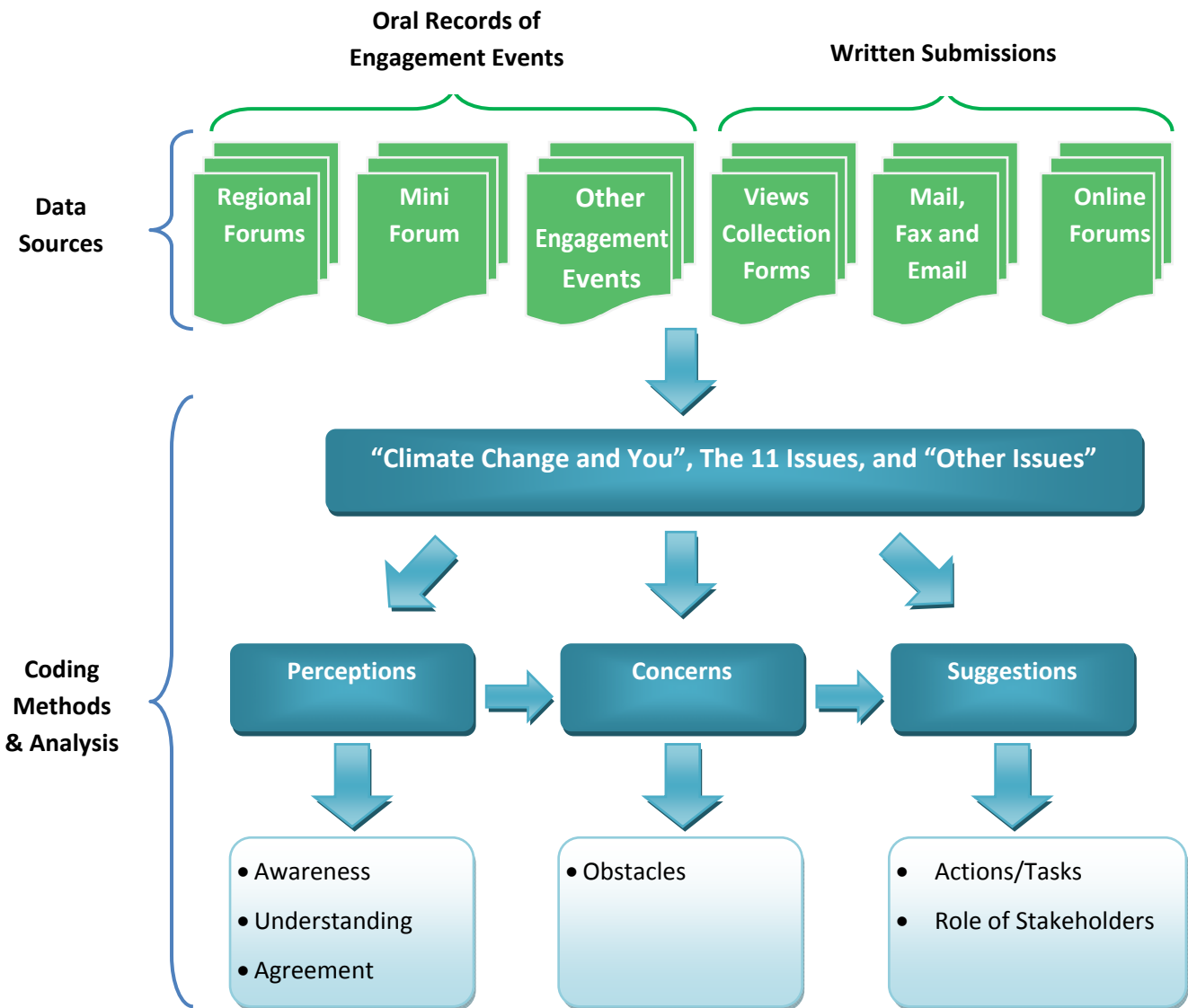
3.3 CODING METHOD ANALYSIS

3.3.1 Data Coding Scheme

3.3.1.1 Figure 2 shows that we have six main data sources including three oral records sources and three sources of written submissions for coding method analysis. All the verbal opinions of the public from regional forums, mini forum, and other engagement events were recorded by the trained note-takers from IRA⁵. For the regional and mini forums, two note-takers were sent to each discussion table while one facilitator from PD led the whole discussion. For the other engagement events, one or two note-takers from IRA were sent to take notes depending on the number of participants for the event. All the written submissions were analysed directly from the original copies. We developed a coding scheme for further analysis which was applied to different sources in order to accurately extract and represent the views of respondents. In sum, we have three main themes. The first theme is to analyse the “perceptions” of the eleven issues put forward by SDC for discussion. This showed whether the respondents agreed or were aware of the issues. The second theme is their “concerns,” which included the consideration of obstacles on the issues that were raised by the respondents. The last theme is the “suggestions” of the participants and their relevant proposals such as educating the public on environmental protection and providing incentives for saving electricity. Each coding theme consists of categories and sub-categories in hierarchical form and is presented in the coding tree in Figure 2. In order to ensure that the coding best reflects the actual views of respondents, the coding scheme and analytic framework had been continually modified throughout the coding process as new variables were found as new data became available.

⁵ IRA provided all the note-takers with a one day training on note-taking skills and briefing on the public engagement exercise to ensure the reliability and quality of the note-takers' work.

Figure 2. The Data Coding Scheme for Analysis



3.3.2. Development of Coding Scheme

3.3.2.1 The textual data sources were analysed by means of carefully-designed code frames. The code frame was completed by several coders as proposed by Weber (1990). Each of the coders did the primary coding independently and compared their findings in order to exhaust the possible codes. This process was repeated until we collected all the views and comments from every data source. In this way, the data was reduced into classified categories and themes to cover the eleven issues.

3.3.2.2 This report extracted both the oral records and written submissions of views from different data sources stated in Section 3.1. All the data collected was first reviewed by the coders for its relevancy before converting it into textual soft copies, which would then be ready for coding. We then defined words, phrases, and sentences as primary recording units. We used the coding procedure proposed by Weber (1990) to develop the coding scheme. There were eight main steps to complete the coding scheme, which Figure 3 below outlines.

- Step 1: Defined Recording Units

- The first set of codes, the “Basic Code Scheme,” was designed based on the three major themes “perceptions,” “concerns,” and “suggestions,” with a few sub-categories under each theme. Then the code set was used for the preliminary coding of all records and imported into software called Nvivo, and the data was sorted into different sub-categories as individual recording units.

- Step 2: Defined Categories

- Using the “Basic Code Scheme” with the preliminary coding result generated from Nvivo, the data was first sorted into different categories. Then from the categories, we looked at the details of the text units by issue; we identified and grouped the relevant word(s), phrase(s), and sentence(s) into very specific sub-categories. The general picture for each issue appeared; we then consolidated and reorganised the recording units under new sub-categories with further reasoning, creating the “Primary Issue Code.”

- Step 3: Tested Coding

- The whole data set was re-coded with the “Primary Issue Code” by the secondary coders with the new set of codes for each issue, so as to test the units and new categories. The data was broken down into detailed sub-categories in an effort to accurately capture respondents’ views from all possible angles.

- Step 4: Assessed Accuracy and Reliability

- To ensure accuracy, this procedure was conducted by two different coders. First of all, they did the coding individually, and then with the recording units, they discussed and compromised on the “Secondary Issue Code” for each issue.

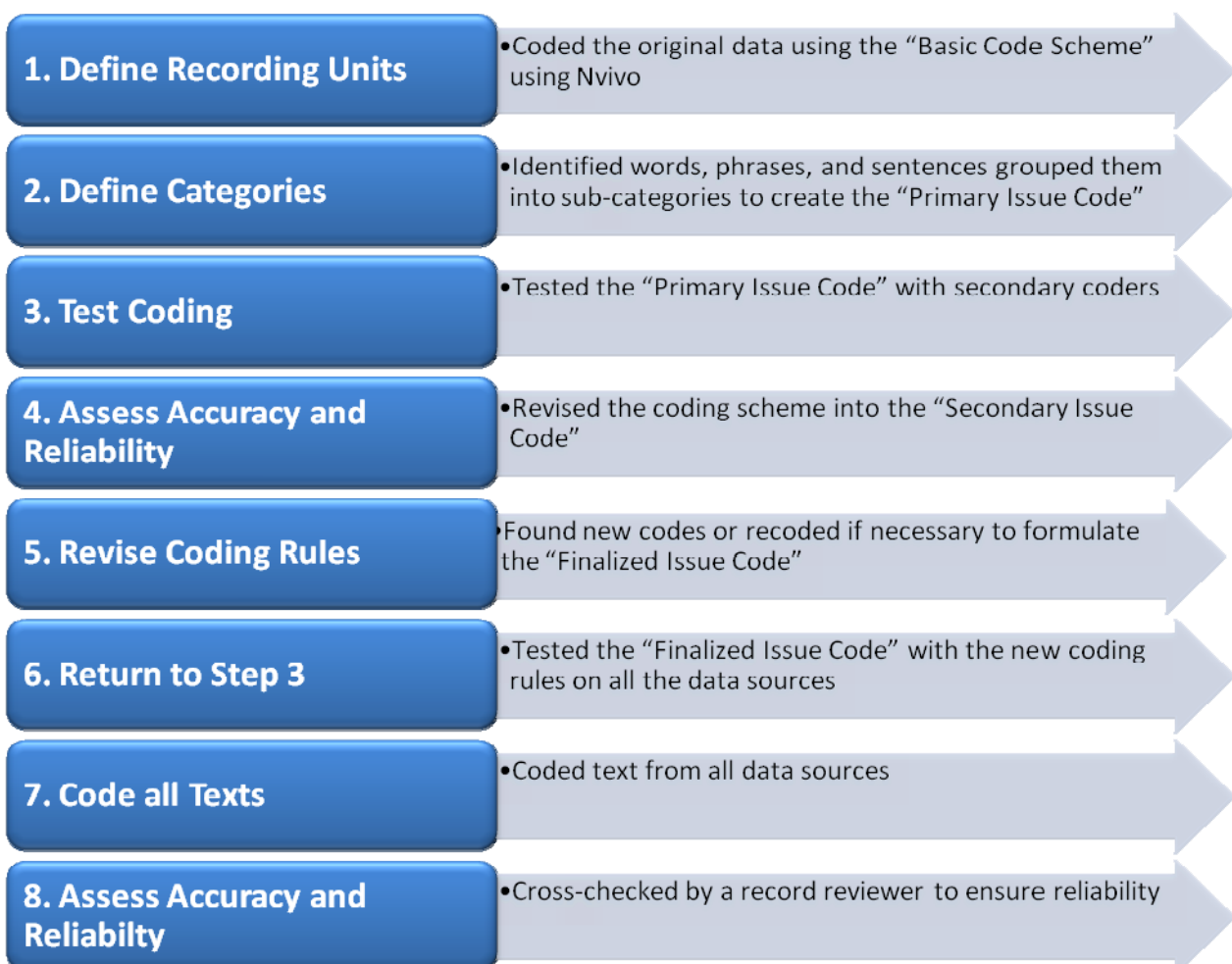
- Step 5: Revised Coding Rules
 - The codes were then further revised by grouping or re-organising similar sub-categories. By now, each issue had its own unique “Finalised Issue Code” to reflect respondents’ views.

- Step 6: Returned to Step 3
 - To further enhance the accuracy and reliability, the third set of coders did the coding again to test the new rules of the “Finalised Issue Code.”

- Step 7: Coded all Text
 - By then, the coding scheme was finalised, thus we did the coding of all text from all data sources and counted the views for each sub-category.

- Step 8: Assessed Accuracy and Reliability
 - We cross-checked with a record reviewer to ensure reliability.

Figure 3. Steps of the Coding Scheme Development



Chapter 4 FINDINGS

- 4.0.1 This chapter provides a general description of the views collected regarding the eleven proposed issues put forward in the IR document i.e. the six issues on systemic enhancement and five issues on facilitation of behaviour change, along with quantitative and qualitative analysis. Section 4.1 provides an overall description of public views on the eleven proposed issues. Section 4.2 reports on the details of the quantitative and qualitative analyses for each of the issues.
- 4.0.2 The findings in this chapter are based on the analysis of the total number of 6,651 records from 279 oral records from five public regional forums held in Shatin, Causeway Bay, Mong Kok, Tsuen Wan and Kwun Tong; 42 oral records from a mini forum held at the Open University of Hong Kong; and 22 oral records of engagement events including briefings and meetings that were held with various supporting organisations, public advisory bodies and major stakeholders. 6,308 written submissions were received via different sources, including 4,689 records received by mail, fax and email; 1,592 records of VCFs; and 27 online posts at the SDC's online discussion forum and HAB's Public Affairs Forum. All three oral and all three written data sources including both open- and close-ended questions related to the eleven proposed issues in the IR document prepared by the PD. For the close-ended questions in the IR document⁶, views were classified as different categories including "YES," "NO," "N/A" "YES" means the respondents agreed with the stated topic; "NO" means the respondents disagreed with the stated topics; "N/A" (Not Available) means there were no responses or comments on the stated topics or the views from the respondents were indifferent to "YES" or "NO"; No figure and grey shading in Appendix 4 means the stated topics were not discussed or covered for some data sources, which is further explained in the Section 4.0.4 and Section 4.0.5. All close-ended views on each issue are shown in percentage form, indicating the number of the respondents who expressed that particular view divided by the total number of the respondents for that issue. Summary of the responses to each issue are discussed in Section 4.2 and listed in Appendix 4.
- 4.0.3 All records of the open-ended questions were coded into three different categories including "perceptions," "concerns," and "suggestions." A "perception" is how the respondents perceived a particular issue, such as whether they agreed or were aware of the issue. A "concern" refers to whether the respondents raised their concerns by further commenting on the issue. A "suggestion" refers to the respondents' recommendation on the issue. After

⁶ It refers to the set of questions shown in Section 4 of the IR document "Put Thoughts into Action: Some Questions For You," pp. 50-52.

coding the records, all relevant texts were coded and used for further analysis. Text units means the “word(s),” “phrase(s),” or “sentence(s)” extracted from the collected views of the respondents, and the number of text units is equivalent to the number of respondents that expressed a particular view. The text units in this report did not include the response of close-ended questions, i.e. “YES,” “NO,” and “N/A”. However, when there were further comments on close-ended questions, they were also coded and included in the text units. A total of 20,137 text units were coded regarding the eleven issues put forward in the IR document for discussion and other issues.

4.0.4 The total number of the respondents for each issue varies as different views collection formats were used for different data sources. For the forums and VCFs, the respondents gave their views based on all the eleven issues put forward in the IR document but did not exactly follow the wording of the issues in the document.

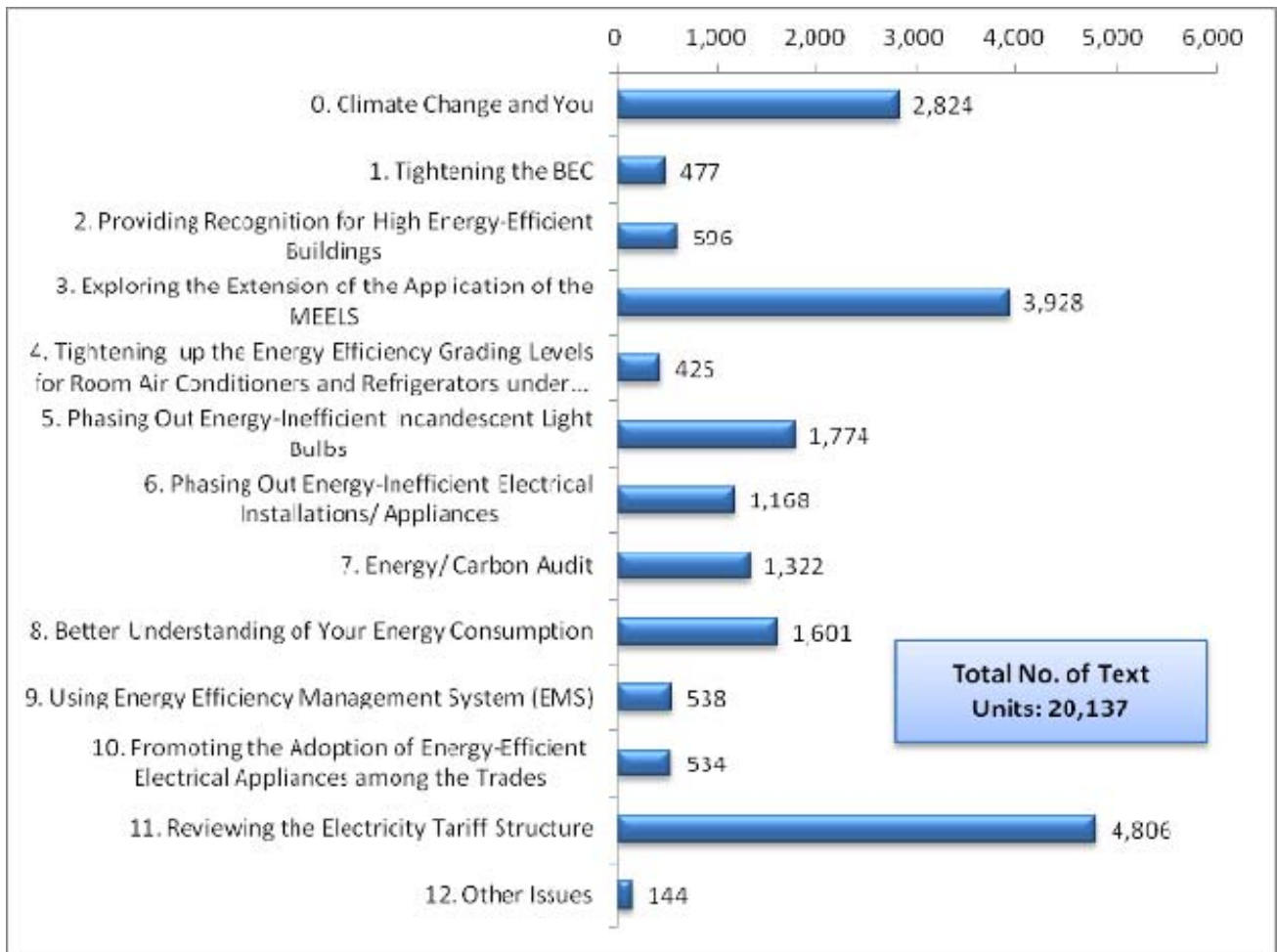
4.0.5 There were three different versions of VCFs distributed during the whole engagement exercise, including the original version with the full set of issues set out in the IR document at the regional and mini forums, the simplified version for students in school talks, and another simplified version for the elderly. The simplified version did not cover certain issues due to the complexity of the issues; as listed in Appendix 2.

4.1 SUMMARY OF VIEWS COLLECTED

- 4.1.1 This section is an overview of the major views collected throughout the whole engagement exercise. Figure 4 shows the number of text units for each of the eleven issues proposed in the IR document and other issues⁷. Quotes of views are listed in Appendix 6.
- 4.1.2 The following issues garnered the largest number of text units: “reviewing the electricity tariff structure,” “exploring the extension of the application of the MEELS,” and “climate change and you.” Fewer numbers of text units were shown in certain issues including “other issues,” “tightening up the energy efficiency grading levels for room air conditioners and refrigerators under the MEELS,” and “tightening the BEC.”
- 4.1.3 Regarding the number of text units coded from the respondents’ views, the proposed issues having the lowest number of coded text units were those areas with relatively more complicated and difficult concepts. Respondents commented the least on these types of issues since they lacked full understanding and knowledge. Examples of these issues include the energy-efficiency standards of BEC, the tightening of the grading levels of MEELS, the electricity tariff structure, and the EMS. On the other hand, those issues with the largest number of text units were those issues that are more a part of respondents’ daily life, such as the extension of the application of the MEELS, the impacts of climate change, phasing out energy-inefficient incandescent light bulbs, and the information on electricity bills.
- 4.1.4 Table 3 gives a general picture of the total number of text units categorised by “perceptions,” “concerns,” and “suggestions” of each issue proposed in the IR document. Due to the different nature of the data sources as explained in Section 4.0.4 and Section 4.0.5, a large number of text units do not necessarily represent a higher level of support from respondents since some issues covered more questions and had a larger number of respondents generating a larger number of text units. Large numbers of text units indicate more relevant comments were made by respondents regarding that particular issue.

⁷ Other issues mean the views from the respondents that did not fit into the eleven proposed issues in the IR document but were relevant to climate change.

Figure 4. Total Number of Text Units* by Issue



*Note: Text units mean the “word(s),” “phrase(s),” or “sentence(s)” extracted from the views collected from the respondents.

Table 3. Distribution of the Total Number of Text Units* by Issue

| Issues | Perceptions | Concerns | Suggestions | Total |
|--|--------------|------------|---------------|---------------|
| Climate Change and You | 2,818 | 6 | N/A | 2,824 |
| Systemic Enhancement | | | | |
| 1 Tightening the BEC | 197 | 43 | 237 | 477 |
| 2 Providing Recognition for High Energy-Efficient Buildings | 154 | 77 | 365 | 596 |
| 3 Exploring the Extension of the Application of the MEELS | 583 | 178 | 3,167 | 3,928 |
| 4 Tightening up the Energy Efficiency Grading Levels for Room Air Conditioners and Refrigerators under the MEELS | 239 | 32 | 154 | 425 |
| 5 Phasing Out Energy-Inefficient Incandescent Light Bulbs | 1,575 | 72 | 127 | 1,774 |
| 6 Phasing Out Energy-Inefficient Electrical Installations/Appliances | 56 | 24 | 1,088 | 1,168 |
| Facilitation of Behaviour Change | | | | |
| 7 Energy/Carbon Audit | 314 | 64 | 944 | 1,322 |
| 8 Better Understanding of Your Energy Consumption | 26 | N/A | 1,575 | 1,601 |
| 9 Using Energy Efficiency Management System (EMS) | 9 | 18 | 511 | 538 |
| 10 Promoting the Adoption of Energy-Efficient Electrical Appliances among the Trades | 90 | 23 | 421 | 534 |
| 11 Reviewing the Electricity Tariff Structure** | 2,633 | 28 | 2,145 | 4,806 |
| 12 Other Issues | 20 | 24 | 100 | 144 |
| Total: | 8,714 | 589 | 10,834 | 20,137 |

*Note: Text units mean the “word(s),” “phrase(s),” or “sentence(s)” extracted from the views collected from the respondents.

**Note: There were 933 mass identical emails and 3,633 mass submissions of a single street survey both of which only commented on the issue of “reviewing the electricity tariff structure.”

4.1.5 Tables 4a and 4b show the distribution of the text units in each issue by individual data source. Most of the text units were coded from the simplified VCFs for secondary school students and submissions via mail, fax and email; they comprised 36% and 33% of the total, respectively. The text units coded from the original VCFs and the oral records of the regional forums contributed 16% and 8%, respectively. The least number of text units were coded from online forums and other engagement events, which both accounted for less than 1% of the total text units.

Distribution of the Total Number of Text Units for Oral Records

- 4.1.6 For the regional forums, most text units were coded on the topic of extension of the application of the MEELS and the information and presentation style of electricity bills. The smallest numbers of text units were coded on “climate change and you” and imposing minimum energy efficiency standards on electrical appliances/installations. For the mini forum, a lot of issues were not discussed during the forum due to time limitations. This was one of the reasons that less than ten or zero text units were coded in some issues including information and presentation style of electricity bills, using the EMS, promoting the adoption of energy-efficient electrical appliances among the trades, reviewing the electricity tariff structure and “climate change and you”. Most of the text units coded from the oral record of the mini forum were on the extension of MEELS and providing recognition of the BEC.
- 4.1.7 There were relatively few text units coded from the oral records of other engagement events; most of the text units coded from these records were in the area of energy/carbon audits. Similarly, the written submissions from the online forums did not generate many text units. Most of the text units were in the area of “climate change and you”. Six out of twelve issues including the “other issues” were not even discussed.

Distribution of the Total Number of Text Units for Written Submissions

- 4.1.8 For items submitted via mail, fax and email, most text units were coded in the area of reviewing the electricity tariff structure because there were 4,566 mass identical emails and street surveys regarding this issue. On the other hand, the lowest numbers of text units were coded on tightening of the MEELS and tightening the BEC.
- 4.1.9 Most text units were coded in the area of carbon audits from the original VCFs. As for the simplified VCFs for both school talks and the elderly, most text units were coded in the area of the extension of the MEELS.

Overall Distribution of the Average Number of Text Units

- 4.1.10 Tables 4a and 4b show the overall distribution of the average number of text units by data source and issue. The average number of text units is calculated as the total number of text units extracted from the records of the data source divided by the total number of records for each data source. A high average number of text units means that, in general, the respondents from that particular data source gave out more relevant comments on the issue. As the table shows, the highest average numbers of text units for most of the issues were coded from original VCFs, including the areas of tightening the BEC, recognition of the BEC, energy/carbon audits, better understanding of energy consumption, and promoting the adoption of energy-efficient electrical appliances among the trades.
- 4.1.11 Similarly, the highest average numbers of text units for some of the issues were coded from the written submissions of the simplified VCFs for the elderly, such as the extension of the MEELS, phasing out of energy-inefficient incandescent light bulbs, reviewing the electricity tariff structure and “climate change and you”. This could be reasonably explained as the elderly were normally mostly concerned with these areas that affect them most.

Table 4a. Overall Distribution of the Average Number of Text Units* by Data Source and Issue (Part 1 - Systemic Enhancement)

| Issues | Systemic Enhancement | | | | | | | | | | | | | |
|---|---------------------------|-----------------|-----------------------|-----------------|--|-----------------|--|-----------------|---|-----------------|--|-----------------|---|-----------------|
| | 0. Climate Change and You | Avg. Text Units | 1. Tightening the BEC | Avg. Text Units | 2. Recognition for High Energy Efficient Buildings | Avg. Text Units | 3. Exploring the Extension of the Application of the MEELS | Avg. Text Units | 4. Tightening up the Energy Efficiency Grading Levels for Room Air Conditioners and Refrigerators under the MEELS | Avg. Text Units | 5. Phasing Out Energy-Inefficient Incandescent Light Bulbs | Avg. Text Units | 6. Phasing Out Energy-Inefficient Electrical Installations/Appliances | Avg. Text Units |
| Data Sources | | | | | | | | | | | | | | |
| 1 Oral Records of Engagement Events: | | | | | | | | | | | | | | |
| (a) Regional Forums | 57 | 0.20 | 99 | 0.35 | 153 | 0.55 | 381 | 1.37 | 107 | 0.38 | 110 | 0.39 | 64 | 0.23 |
| (b) Mini Forum | 1 | 0.02 | 29 | 0.69 | 33 | 0.79 | 47 | 1.12 | 12 | 0.29 | 24 | 0.57 | 11 | 0.26 |
| (c) Other Engagement Events | 4 | 0.18 | 9 | 0.41 | 18 | 0.82 | 8 | 0.36 | 19 | 0.86 | 15 | 0.68 | 2 | 0.09 |
| 2 Written Submissions: | | | | | | | | | | | | | | |
| (a) Mail, Fax and Email | 171 | 0.04 | 91 | 0.02 | 139 | 0.03 | 146 | 0.03 | 61 | 0.01 | 150 | 0.03 | 220 | 0.05 |
| (b) i) Views Collection Forms (VCFs - Original) | 428 | 1.81 | 248 | 1.05 | 253 | 1.07 | 333 | 1.41 | 105 | 0.44 | 204 | 0.86 | 245 | 1.03 |
| (b) ii) VCFs (Simplified - School Talks) | 1,799 | 1.40 | 0 | 0.00 | 0 | 0.00 | 2,776 | 2.16 | 115 | 0.09 | 1,169 | 0.91 | 537 | 0.42 |
| (b) iii) VCFs (Simplified - Elderly) | 322 | 4.81 | 0 | 0.00 | 0 | 0.00 | 237 | 3.54 | 6 | 0.09 | 101 | 1.51 | 89 | 1.33 |
| (c) Online Forums | 42 | 1.56 | 1 | 0.04 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 0.04 | 0 | 0.00 |
| Total: | 2,824 | 0.42 | 477 | 0.07 | 596 | 0.09 | 3,928 | 0.59 | 425 | 0.06 | 1,774 | 0.27 | 1,168 | 0.18 |

*Note: Text units mean the “word(s),” “phrase(s),” or “sentence(s)” extracted from the views collected from the respondents. The average number of text units means the total number of text units coded from the records of the data source divided by the total number of records for each data source.

Table 4b. Overall Distribution of the Average Number of Text Units* by Data Source and Issue (Part 2 – Facilitation of Behaviour Change)

| Data Source | Issues | Facilitation of Behaviour Change | | | | | | | | | | | | Total No. of Text Units | % of Total Text Units | Total No. of Records |
|---|---|----------------------------------|-----------------|--|-----------------|--|-----------------|---|-----------------|--|-----------------|-----------------|-----------------|-------------------------|-----------------------|----------------------|
| | | 7. Energy/ Carbon Audit | Avg. Text Units | 8. Better Understanding of Your Energy Consumption | Avg. Text Units | 9. Using Energy Efficiency Management System (EMS) | Avg. Text Units | 10. Promoting the Adoption of Energy-Efficient Electrical Appliances among the Trades | Avg. Text Units | 11. Reviewing the Electricity Tariff Structure | Avg. Text Units | 12. Other Views | Avg. Text Units | | | |
| 1 Oral Records of Engagement Events: | | | | | | | | | | | | | | | | |
| (a) | Regional Forums | 145 | 0.52 | 197 | 0.71 | 66 | 0.24 | 75 | 0.27 | 84 | 0.30 | 61 | 0.22 | 1,599 | 8% | 279 |
| (b) | Mini Forum | 30 | 0.71 | 4 | 0.10 | 4 | 0.10 | 0 | 0.00 | 0 | 0.00 | 9 | 0.21 | 204 | 1% | 42 |
| (c) | Other Engagement Events | 40 | 1.82 | 2 | 0.09 | 7 | 0.32 | 6 | 0.27 | 16 | 0.73 | 17 | 0.77 | 163 | 1% | 22 |
| 2 Written Submissions: | | | | | | | | | | | | | | | | |
| (a) | Mail, Fax and Email** | 500 | 0.11 | 153 | 0.03 | 234 | 0.05 | 204 | 0.04 | 4,597 | 0.92 | 36 | 0.29 | 6,702 | 33% | 4,689 |
| (b) | i) Views Collection Forms (VCFs - Original) | 599 | 2.53 | 320 | 1.35 | 225 | 0.95 | 249 | 1.05 | 18 | 0.08 | 7 | 0.03 | 3,234 | 16% | 237 |
| | ii) VCFs (Simplified - School Talks) | 0 | 0.00 | 889 | 0.69 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 7,285 | 36% | 1,288 |
| | iii) VCFs (Simplified - Elderly) | 0 | 0.00 | 36 | 0.54 | 0 | 0.00 | 0 | 0.00 | 83 | 1.24 | 0 | 0.00 | 874 | 4% | 67 |
| (c) | Online Forums | 8 | 0.30 | 0 | 0.00 | 2 | 0.07 | 0 | 0.00 | 8 | 0.30 | 14 | 0.52 | 76 | 1% | 27 |
| Total: | | 1,322 | 0.20 | 1,601 | 0.24 | 538 | 0.08 | 534 | 0.08 | 4,806 | 0.72 | 144 | 0.02 | 20,137 | 100% | 6,651 |

*Note: Text units mean the “word(s),” “phrase(s),” or “sentence(s)” extracted from the views collected from the respondents. The average number of text units means the total number of text units coded from the records of the data source divided by the total number of records for each data source.

**Note: For items submitted via mail, fax and email, the total number of records for all issues is 123 excluding the mass submission of 933 identical emails and 3,633 street surveys commenting only on the issue of “reviewing the electricity tariff structure,” which accounted for 4,350 text units on this particular issue.

SYSTEMIC ENHANCEMENT

- 4.1.12 The overall views showed that the proposed issues of systemic enhancements involved technical aspects, on which respondents from the general public found it difficult to express their views.
- 4.1.13 For the proposed issues of systemic enhancement, the collected views reflected that the Building Energy Code (BEC) should be tightened due to the fact that it helped reduce their energy consumption and carbon emissions hence minimising negative impacts on the environment and enabling respondents to save money. Also, the existing standard of the BEC should be reviewed at regular intervals in order to maintain the standard in step with global practices, technological advancement, and new data and information. Research should be conducted with justification and adequate consultation with the industry on the details of the standards including a clear road map and time frame for implementation. One obstacle to tightening energy efficient standards mentioned by respondents was the difficulty of implementing energy efficiency standards in old buildings as different types of buildings had different natures. Another concern was the cost effectiveness and whether the payback of the invested capital and money was certain. Respondents also suggested incentives including financial and technical assistance should be provided by the Government.
- 4.1.14 Regarding whether to provide recognition for high energy-efficient buildings, respondents suggested utilising an award and labelling scheme such as the Building Environmental Assessment Method (BEAM) Plus certification system accredited by the Hong Kong Green Building Council since it already existed along with implementing more promotion and education on the existing award scheme. Also, more incentives and assistance should be provided by the Government such as financial subsidies in the form of tax reductions for building developers. Besides, energy-efficient buildings should be recognised in order to help encourage developers to develop energy-efficient buildings and increase the buildings' leasing and resale values and increase transparency as well. Respondents mentioned providing recognition could drive more competition in the market and achieve higher levels of energy efficiency. It could serve as an effective tool to convince the public of the effectiveness of high energy-efficient buildings and give them more confidence in the validity of the standards.

- 4.1.15 Collected views showed that respondents were concerned about how to compare the information provided on the labels of different products of different grades and whether the money they saved could offset the higher purchase price. Also, the price was just one of the aspects of the purchasing decision; other factors such as function, style and brand were also important. These criteria needed to be taken into account as well. Besides, respondents suggested the Government should periodically review the existing MEELS in order to make sure the existing scheme was updated. Also, more education should be provided to the public by the Government in order to enhance their awareness of MEELS.
- 4.1.16 Some respondents commented that before tightening the existing grading levels for room air conditions and refrigerators under the MEELS, the Government should provide education and promotion to the general public on the existing energy efficiency grading level of MEELS. Respondents suggested that the scheme should be tightened from a 5-point scale to a 10-point scale or sub-categorise individual levels into different levels and should be implemented in phases as well. Comprehensive reviews on the existing grading levels should be completed to measure the understanding of the general public regarding the details of MEELS. The grading levels should also be reviewed regularly in order to keep pace with international standards and the latest technological advancements. Respondents expressed the idea that research should utilise international standards when reassessing grading levels.
- 4.1.17 There were differing views on restricting energy-inefficient incandescent light bulbs. Some considered that it should be implemented gradually. Also, a comprehensive recycling system should be considered and appropriate regulation and legislation was needed. The respondents suggested the Government should provide some educational programs to simultaneously inform the public of the beginning of the transition to energy-efficient light bulbs and the benefit of using them. On the other hand, some respondents disagreed with restricting the supply of energy-inefficient incandescent light bulbs. Affordability was one of the main concerns from the respondents since low-income families would not be able to adopt the energy-efficient light bulbs as they were more expensive than the incandescent light bulbs in general. Besides, lighting fixtures such as crystal lighting fixtures could not easily accommodate energy-efficient light bulbs both in terms of the materials used and aesthetic appearance. Also, availability of sufficient choices should be thoroughly assessed as well, since restricting the supply of energy-inefficient incandescent light bulbs would consequently limit market choices.

4.1.18 Respondents' concerns about phasing out energy-inefficient electrical installations/appliances and imposing minimum energy performance standards were quite similar to the concerns raised about phasing out energy-inefficient incandescent light bulbs; respondents were worried about limiting consumer choices and that low-income families would not be able to afford energy-efficient electrical installations/appliances, and the problem related to disposing of inefficient appliances. Also, some respondents suggested that the Government should provide more information to the public on the availability of more efficient alternatives and the effectiveness of them. Others suggested that research should be undertaken by independent organisations to identify grossly inefficient installations and appliances. Besides, respondents suggested examples of electronic appliances that should have minimum energy performance standards or should be phased out. Most of them made their suggestions based on three criteria, including high energy consumption, the most commonly used and most frequently used. Respondents suggested the Government should impose regulations on the waste of inefficient installations/appliances in order to address the concerns related to the problems associated with the disposal of old appliances.

FACILITATION OF BEHAVIOUR CHANGE

4.1.19 With regard to the proposed issue of facilitation of behaviour change, since energy/carbon audits were still not popular and widely adopted in Hong Kong, respondents suggested the Government should first take the lead in practicing low carbon management by requiring all departments, educational institutes and other facilities to conduct regular energy/carbon audits, report the results, and, where appropriate, set reduction targets in order to serve as a role model to the public. One of the concerns raised by respondents was that there were a number of free carbon calculation tools, but they were not widely used because of limited resources and time implications to businesses arising from an extensive assessment of their operations. Besides, respondents were concerned that there was a lack of understanding of energy/carbon audits; such as confusion over the terms "energy audit" and "carbon audit". They were not sure about the differences and similarities between them. Also, respondents suggested financial assistance would help the most, while some suggested support such as seminars and training for engineers and professionals would also help facilitate the use of carbon audits. Recognitions such as awards and certificates could also be given to those who had completed a carbon audit with good performance.

- 4.1.20 In general, respondents suggested more information should be included in their electricity bills and the types of information should be presented in a simple and easy-to-read manner so that they could grasp the meaning easily at first glance like a bar chart or pie chart or in table form, which could show the details of energy consumption and the amount paid. Besides, respondents suggested that, in order to better understand carbon emission levels, an illustration of the number of tree to be planted to offset the corresponding carbon emissions or the household's carbon footprint should be included on bills and emoticons like a smiley face icon could signify below average energy consumption. Besides, some respondents suggested printing green tips and slogans such as "Save Energy, Save Money" in order to increase awareness of the need to reduce energy consumption. Also, some suggested that energy consumption trends be presented in an encouraging and discouraging way like a warning message in red could be printed on the electricity bill if there was an increasing trend of energy consumption compared to the previous month, and complimentary words could encourage households that reduced energy consumption. It was further suggested that a breakdown of energy consumption should be shown such as peak hour/daily/monthly/annual electricity consumption as well as the amount paid per capita and per square-meter/foot. Benchmarks by average household size should be shown for both energy consumption and the amount paid.
- 4.1.21 Respondents considered that proper advertising and promotion were needed to promote the adoption of EMS, such as through billboards and television ads. Also, it was suggested that the benefits of adopting EMS should be promoted with concrete examples and data in order to increase awareness among building management teams. Seminars and workshops could be arranged in order to further enhance building managers' knowledge and skills in terms of the benefits and costs of adopting EMS. Some suggested that incentives and assistance should be provided by the Government such as giving financial subsidies, awards and certificates to those who adopted EMS in their buildings and providing technical assistance. Besides, a review and assessment of existing building design and structure could help promote the adoption of EMS by having a better design and implementation of the energy saving system for various types of the buildings.
- 4.1.22 Respondents suggested that the Government should encourage investments in research and development for energy-efficient electrical appliances through various funding schemes as it was not purely for the benefit of energy saving but also served as an incentive for innovation in other areas as well in the future. It was also suggested that the Government should step up

publicity and dissemination of information on energy-efficient electrical appliances to enhance awareness and make more choices available for local trade use.

4.1.23 There was no apparent consensus on which tariff structure should be adopted. Some respondents suggested that the progressive tariff structure should be adopted and some of their suggestions criticised the regressive tariff structure because it actually facilitated higher energy consumption. A few respondents mentioned the progressive tariff structure should be based on energy efficiency or energy intensity (e.g. per square foot) instead of the total amount of energy consumption since some bulk users consumed more energy than others, but their consumption might be more efficient as well. It was suggested that education on the existing tariff structure and the costs and benefits of other tariff structures should also be provided by the Government. Some respondents suggested reviewing the incentives and assistance provided by the Government such as tax and rate reductions for users with high energy efficiency.

4.1.24 Besides the eleven issues in the IR document, some respondents also commented on other related issues, such as some suggested that enhancing the public's awareness by providing more education and promotion was important in order to further raise awareness of the problems related to climate change. Some considered that education and promotion on the reasons and methods of systemic enhancement as well as adopting measures that facilitate behaviour change played an important role in combating climate change. Also, some respondents commented that in order to reduce energy consumption effectively, the regulation of signboards was necessary. They further elaborated that the public would consume less electricity for air-conditioning if there was less heat generated by such signboards outside their buildings. Commercial lighting systems such as billboards, decoration lighting or display spotlights should be turned off after certain hours at night, except those used for safety or security reasons. Also, some respondents suggested financial penalties should be imposed for violations. Any money received from the penalty could be deposited into environmental fund.

4.2 QUANTITATIVE AND QUALITATIVE ANALYSIS

This section focuses on presenting the quantitative and qualitative analysis based on the eleven issues, and views on other issues beyond the eleven issues outlined in the IR document are discussed as well in the later part of the section. For each issue, summary of responses is listed in Appendix 4, and the number of text units is included in Appendix 5⁸.

CLIMATE CHANGE AND YOU

Perceptions

4.2.0.1 More than half of the respondents (65% - 1,306 out of 1,996 respondents)⁹ perceived that climate change had a negative impact on them. The most mentioned impacts could be divided into global and personal impacts. Global impacts included changing weather patterns and average temperatures (TU=657), deterioration of the ecosystem and environment (TU=186), and the increasing risk of natural disasters and more frequent occurrences of extreme weather (TU=121). Personal impacts of climate change included increasing financial burdens (TU=212) and health and safety concerns (TU=150).

4.2.0.2 Most of the respondents (76% - 1,342 out of 1,764 respondents)¹⁰ agreed they could contribute to the Government's proposed target of reducing Hong Kong's carbon intensity by 50% - 60% in 2020 as compared with the 2005 level. The respondents mentioned different contributions they had already done or could do. The most popular contribution the respondents mentioned was consuming less electricity (TU=724) and using more public transportation instead of driving their own cars (TU=350). Changing their general behaviours (TU=205) such as recycling and planting more trees was also mentioned by the respondents. However, some of the respondents preferred using more energy-efficient appliances (TU=93).

⁸ Text unit means the "word(s)," "phrase(s)," or "sentence(s)" extracted from views collected from the respondents.

⁹ Refers to Table A4.1 in Appendix 4 and Table A5.0 in Appendix 5.

¹⁰ Refers to Table A4.2 in Appendix 4.

SYSTEMIC ENHANCEMENT

4.2.1 Tightening the Building Energy Code (BEC)

Perceptions

4.2.1.1 The collected views showed that almost half of the respondents (49% - 332 out of 679 respondents)¹¹ agreed that the energy efficiency standards for the four buildings services installations covered by the BEC should be tightened. The respondents agreed the BEC should be tightened due to the fact that it helps reduce their energy consumption and carbon emissions hence minimising negative impacts on the environment and enabling respondents to save money (TU=83). There were also some views that the existing standards were loose and not compatible with today's technological level (TU=16). However, some respondents disagreed (4% - 28 out of 679 respondents) that there was a need to tighten the standards. They were of the view that tightening the standards would further increase the production cost of the developers and hence enlarged the financial burden of the consumers (TU=7). Some also expressed that the existing standards were already sufficient (TU=4). More than 47% (319 out of 679 respondents) of the respondents did not make any comments on tightening the BEC.

4.2.1.2 Regarding whether the BEC should cover other types of building services installations, some respondents (38% - 238 out of 635 respondents)¹² showed agreement since the BEC helps to reduce energy consumption and hence protect the environment (TU=4). Respondents believed the BEC should regulate installations that consume the most energy (TU=12) and are most frequently used (TU=2). Examples of building services installations suggested by the respondents included design and material use (TU=28), outdoor lighting and thermal insulations (TU=27), water and heating systems (TU=25), ventilations (TU=10), and plumbing and drainage systems (TU=10). However, some (13% - 85 out of 635 respondents) did not agree there was a need to cover other types of installations since the existing coverage was sufficient (TU=11), and those installations already accounted for the majority of energy consumption (TU=3).

¹¹ Refers to Table A4.4 in Appendix 4 and Table A5.1 in Appendix 5.

¹² Refers to Table A4.5 in Appendix 4.

4.2.1.3 13% (24 out of 177)¹³ of the respondents from the regional and mini forums were aware of the BEC while 25% (44 out of 177 respondents) showed they were not well aware of or had no comments (61% - 109 out of 177 respondents) regarding the BEC and existing energy efficiency standards, such as what kinds of building services installations were covered by the BEC. They had difficulties in giving comments and suggestions.

Concerns

4.2.1.4 One obstacle to tightening energy efficient standards mentioned by respondents was the difficulty of implementing energy efficiency standards in old buildings as different types of buildings had different natures (TU=12). Another concern was the cost effectiveness and whether the payback of the invested capital and money was certain (TU=11).

Suggestions

4.2.1.5 The respondents suggested the Government should impose regulations, such as recording any violations of the BEC in a black list and imposing penalties (TU=38). In addition to stating their reasons and raising concerns, respondents also made corresponding suggestions, such as reviewing the existing standards at regular intervals in order to maintain the standard in step with global practices, technological advancement, and new data and information. Also, research should be conducted with justification and adequate consultation with the industry on the details of the standards including a clear road map and timeframe for implementation (TU=23). More incentives including financial and technical assistance should be provided by the Government (TU=16). More education initiatives should be implemented as well in order to increase the awareness of the general public regarding the BEC and how the standards worked and benefited them (TU=13).

4.2.2 Providing Recognition for Energy-Efficient Buildings

Perceptions

4.2.2.1 Half of respondents (51% - 364 out of 713)¹⁴ agreed that energy-efficient buildings should be recognised in order to help encourage developers to develop energy-efficient buildings and increase the buildings' leasing and resale values (TU=93) and increase transparency as well (TU=30). Also, providing recognition could drive more competition in the market and achieve higher levels of energy efficiency (TU=15). It could serve as an effective tool to

¹³ Refers to Table A4.3 in Appendix 4.

¹⁴ Refers to Table A4.6 in Appendix 4 and Table A5.2 in Appendix 5.

convince the public of the effectiveness of high energy-efficient buildings and give them more confidence in the validity of the standards (TU=10). 45% (323 out of 713) of respondents had no comments on providing recognition for high energy-efficient buildings.

Concerns

4.2.2.2 Some respondents were concerned whether the standards were compatible with international standards (TU=39). Also, some were concerned that unique standards could not be imposed on different building types as their energy consumption patterns are different (TU=14). A few respondents also expressed the view that buyers and renters of buildings should be able to obtain information about whether a building was being recognised or not before making any decisions about buying or renting (TU=3).

Suggestions

4.2.2.3 Respondents suggested more elements should be included in the assessment of the energy efficiency of buildings such as estimated/actual energy performance (TU=102), the structural design of the buildings (TU=33), innovative measures (TU=26), housekeeping practices (TU=25) and renewable resources installations (TU=20).

4.2.2.4 Besides, the respondents suggested periodic reviews of the current system and research should be done. Respondents also suggested the supervision and assessment of the BEAM Plus certification system or any other recognition scheme could be done by organisations such as the Environmental Protection Department (EPD) or the Electrical and Mechanical Services Department (EMSD) (TU=52). Also, more incentives and assistance should be provided by the Government such as financial subsidies in the form of tax reductions for building developers (TU=40). Respondents also suggested utilizing an award and labelling scheme such as the BEAM Plus certification system accredited by the Hong Kong Green Building Council since it already existed along with implementing more promotion and education on the existing award scheme (TU=29).

4.2.3 Exploring the Extension of the Application of the Mandatory Energy Efficiency Labeling Scheme (MEELS)

Perceptions

- 4.2.3.1 More than half of respondents (66% - 1,343 out of 2,037)¹⁵ expressed that they would consider buying energy-efficient electrical appliances even if their price was higher than energy-inefficient models since it could reduce energy consumption, hence saving more money (TU=224) and protecting the environment as well as the next generation (TU=140). Besides, energy-efficient appliances were more durable (TU=11). However, some respondents did think the appliances under MEELS were too expensive (TU=33), and it also caused additional waste as old electrical appliances were thrown into landfills (TU=4).
- 4.2.3.2 Most of the total respondents (78% 1,628 - out of 2,080)¹⁶ agreed more electrical appliances should be introduced under MEELS. Respondents agreed that it provided more choices to consumers and reduce prices (TU=56) and helped to increase awareness of environmental protection (TU=34). Besides, it incentivised the supply of energy-efficient electrical appliances (TU=17). Also, respondents mentioned many new/frequently used electrical appliances are not covered (TU=19). However, 8% (166 out of 2,080) of respondents disagreed there was a need to introduce more electrical appliances under MEELS since they perceived it was not effective in terms of saving energy (TU=10) while 14% (286 out of 2,080) of the respondents neither agreed nor disagreed or did not make any comment at all.

Concerns

- 4.2.3.3 Respondents were concerned about the content of the information provided on the labels for comparison between products of different grades and whether the money they saved could offset the higher purchase price (TU=122). Also, the price was just one of the aspects of the purchasing decision; other factors such as function, style and brand were also important. These criteria needed to be taken into account as well (TU=41). Another concern from the respondents on the issue of extending the coverage of MEELS was the increasing financial burden (TU=9) due to the higher costs of appliances driven by the need for further research and development of energy-efficient appliances. Some respondents held the view that extending the coverage of MEELS to other electrical

¹⁵ Refers to Table A4.7 in Appendix 4 and Table A5.3 in Appendix 5.

¹⁶ Refers to Table A4.8 in Appendix 4.

appliances would cause further confusion among consumers since they did not completely understand the existing scheme (TU=3).

Suggestions

- 4.2.3.4 The respondents suggested the Government should provide more education to the public in order to enhance their awareness of MEELS (TU=38). Some respondents suggested, in order to better benefit consumers, the Government should extend the coverage of MEELS to all electrical appliances by legislation (TU=18). Also, some respondents pointed out financial assistance should be provided by the Government in order to help low-income families to install energy-efficient electrical appliances (TU=15). Some also suggested that the Government should periodically review the existing MEELS in order to make sure the existing scheme was updated (TU=4).
- 4.2.3.5 Respondents believed appliances that consume the most energy (TU=39) and are most frequently used (TU=33) should be included in MEELS. The following are the electrical appliances that respondents suggested should be covered under MEELS: microwave ovens and conventional ovens (TU=180); mobile phones and fixed-line telephones (TU=118); and cooking stoves (TU=102). The respondents also mentioned that the appliances which were under VEELS should also be included in MEELS, such as televisions (TU=556), computers (TU=537), water heaters (TU=329), hair dryers (TU=126), rice cookers (TU=81) and other office equipment such as fax and copy machines (TU=45). Some respondents mentioned some electrical appliances that are already covered under MEELS, such as air-conditioners (TU=126), refrigerators (TU=112), washing machines (TU=89), compact fluorescent lamps (TU=82) and dehumidifiers (TU=31), which reflected their lack of understanding of the existing MEELS and VEELS.

4.2.4 Tightening Up the Energy Efficiency Grading Levels for Room Air Conditioners and Refrigerators under the Mandatory Energy Efficiency Labeling Scheme (MEELS)

Perceptions

- 4.2.4.1 32% (663 out of 2,085)¹⁷ of the respondents agreed that there was a need to tighten up the grading levels for room air conditioners and refrigerators under MEELS due to technological advancement. They agreed that electrical appliances today were generally more energy-efficient than those produced in the past and that the existing grading levels

¹⁷ Refers to Table A4.9 in Appendix 4 and Table A5.4 in Appendix 5.

for room air conditioners and refrigerators now were too loose (TU=59). Also, tightening the grading levels for room air conditioners and refrigerators could enable consumers to compare and choose more efficient electrical appliances (TU=30). It was also a way to incentivise manufacturers to produce more efficient electrical appliances (TU=18). However, there were respondents (51% - 1,062 out of 2,085) who disagreed with the need to tighten the grading levels for room air conditioners and refrigerators since too many grading levels could cause confusion among the public (TU=41). Respondents also pointed out that it would increase production costs and hence retail prices (TU=16). Besides, the appliances would become more efficient over time as a result of market competition (TU=7). 17% (360 out of 2,085) of the respondents neither agreed nor disagreed or made any comments regarding whether there is a need to tighten up the grading levels for room air conditioners and refrigerators under MEELS.

Concerns

4.2.4.2 One main concern was that, before tightening the existing grading levels for room air conditioners and refrigerators, comprehensive reviews on the existing grading levels should be completed to measure the understanding of the general public regarding the details of MEELS (TU=37). Also, cost effectiveness was another concern for the respondents since it affected the low-income groups the most (TU=8). Some respondents were also concerned whether the energy-efficiency of room air conditioners and refrigerators was durable and sustainable (TU=6).

Suggestions

4.2.4.3 Some respondents suggested that tightening the grading levels for room air conditioners and refrigerators should be implemented in phases (TU=68). Also, it was suggested the grading levels for room air conditioners and refrigerators and the maintenance of appliances should be reviewed regularly in order to keep pace with international standards and the latest technological advancements. They also expressed the idea that research should utilise international standards when reassessing grading levels (TU=37). Besides, the Government should provide education and promotion to the general public on the existing energy efficiency grading levels of MEELS (TU=16). Respondents suggested that the scheme should be tightened from a 5-point scale to a 10-point scale or sub-categorise individual levels into different levels (i.e. having a level of 1A or 1B) (TU=7). Also, financial incentives and assistance should be given to those who face financial difficulties in affording such appliances (TU=5).

4.2.5 Phasing Out Energy-Inefficient Incandescent Light Bulbs

Perceptions

- 4.2.5.1 Around 47% (945 out of 2,015)¹⁸ of total respondents used energy-efficient light bulbs at their homes and workplaces and gave ample positive feedback that using energy-efficient light bulbs helped reduce energy consumption and saved money (TU=290). 45% (899 out of 2,015) of respondents did not comment on whether they were using energy-efficient light bulbs. Also, some respondents stated that they needed to replace energy-efficient light bulbs considerably less than incandescent bulbs as the lifespan of energy-efficient light bulbs is generally longer than incandescent bulbs (TU=73). Some respondents (8% - 171 out of 2,015) were not using energy-efficient light bulbs since they were expensive and could not afford them (TU=22). Besides, some respondents suggested that people would not replace the energy-inefficient light bulbs until they were not functional (TU=6).
- 4.2.5.2 More than half of respondents (55% - 1,121 out of 2,034)¹⁹ thought restricting the supply of energy-inefficient incandescent light bulbs in Hong Kong was a good step to take since energy-efficient light bulbs had a longer life span and enable energy savings (TU=627). Also, the respondents (TU=73) thought restricting the supply of the inefficient light bulbs would drive more people to adopt the efficient one. 29% (582 out of 2,034) of the respondents disagreed with restricting the supply of energy-inefficient incandescent light bulbs since they thought it should not be restricted but phased out automatically through market competition (TU=51). 16% (331 out of 2,034) of respondents did not comment on whether they were using energy-efficient light bulbs and on whether the supply of energy-inefficient incandescent light bulbs in Hong Kong should be restricted.

Concerns

- 4.2.5.3 Affordability (TU=64) was one of the main concerns from the respondents on restricting the supply of the energy-inefficient incandescent light bulbs since low-income families would not be able to adopt the energy-efficient light bulbs as they were more expensive than the incandescent light bulbs in general. This was relatively important especially for those facing financial difficulties. Also, some lighting fixtures such as crystal lighting fixtures could not easily accommodate energy-efficient light bulbs both in terms of the materials used and aesthetic appearance (TU=31). One other concern respondents had was that of the potential environmental hazards posed by the improper disposal of energy-

¹⁸ Refers to Table A4.10 in Appendix 4 and Table A5.5 in Appendix 5.

¹⁹ Refers to Table A4.11 in Appendix 4.

efficient light bulbs (TU=27). Besides, the availability of sufficient choices should be thoroughly assessed as well, since restricting the supply of energy-inefficient incandescent light bulbs would consequently limit market choices (TU=21).

Suggestions

4.2.5.4 Some respondents suggested restricting the supply of energy-inefficient incandescent light bulbs gradually (TU=44). In order to make the proposal of phasing out energy-inefficient incandescent light bulbs more feasible, the respondents suggested the Government should provide some educational programs to simultaneously inform the public of the beginning of the transition to energy-efficient light bulbs and the benefit of using them (TU=35). Besides, a comprehensive recycling system should be implemented in order to minimise the waste caused by the massive amount of incandescent light bulbs that will be disposed (TU=5), and some suggested the need for appropriate regulation and legislation on waste (TU=24). Financial assistance should be provided by the Government as well in order to increase the affordability of such products for low-income households (TU=19).

4.2.6 Phasing Out Energy-Inefficient Electrical Installations/Appliances

Perceptions

4.2.6.1 43% (281 out of 650)²⁰ of respondents agreed with imposing minimum energy performance standards, and 51% (696 out of 1,355)²¹ of respondents agreed with phasing out energy-inefficient electrical installations/appliances as it could save energy and lower carbon emissions (TU=17). However, some respondents (9% - 57 out of 650) disagreed with imposing minimum energy performance standards as the inefficient electrical installations/appliances would be phased out gradually through market competition automatically (TU=23). Besides, phasing out energy-inefficient electrical installations/appliances would increase retail prices (TU=9). 48% (312 out of 650) of respondents did not comment on imposing minimum energy performance standards for electrical appliances, and 3% (43 out of 1,355) of respondents did not comment on phasing out energy-inefficient electrical installations/appliances.

²⁰ Refers to Table A4.12 in Appendix 4 and Table A5.6 in Appendix 5.

²¹ Refers to Table A4.13 in Appendix 4.

Concerns

4.2.6.2 Respondents' concerns about phasing out energy-inefficient electrical installations/appliances and imposing minimum energy performance standards were quite similar to the concerns raised about phasing out energy-inefficient incandescent light bulbs; respondents were worried about limiting consumer choices (TU=5) and that low-income families would not be able to afford energy-efficient electrical installations/appliances (TU=7). There were also concerns about the problems related to disposing of inefficient appliances (TU=4).

Suggestions

4.2.6.3 Respondents (TU=991) suggested examples of electronic appliances that should have minimum energy performance standards or should be phased out. Most of them made their suggestions based on three criteria, including high energy consumption (TU=32), the most commonly used (TU=14), and most frequently used (TU=3). Some appliances suggested by the respondents were already covered under MEELS, such as air-conditioners (TU=219), lighting appliances (TU=198), refrigerators (TU=124), washing machines (TU=67) and dehumidifiers (TU=14). In addition to that, some respondents suggested that some appliances currently under VEELS should have minimum energy performance standards, such as televisions (TU=83), computers (TU=76), heaters (TU=53) and dryers (TU=20). Other suggestions included fans (TU=23) and cooking stoves (TU=27).

4.2.6.4 Respondents suggested research should be undertaken by independent organisations to identify grossly inefficient installations and appliances (TU=13). Besides, respondents suggested the Government should impose regulations on the waste of inefficient installations/appliances in order to address the concerns related to the problems associated with the disposal of old appliances (TU=13). Also, respondents suggested that the Government should provide more information to the public on the availability of more efficient alternatives and the effectiveness of them (TU=5). In order to facilitate the proposal of phasing out energy-inefficient electrical installations/appliances in a better way, considerations should be made for those who would not be able to afford energy-efficient installations/appliances. It was suggested that the Government could provide corresponding assistance such as financial subsidies for those who had need (TU=4).

FACILITATION OF BEHAVIOUR CHANGE

4.2.7 Energy/Carbon Audit

Perceptions

- 4.2.7.1 Some respondents had the positive perceptions that conducting carbon audits would help reduce energy consumption and serve as an important tool to identify existing energy consumption (TU=62). However, some respondents in the regional and mini forums (20% - 45 out of 228)²² did not know their energy consumption/carbon emissions levels while 8% (18 out of 228) knew their energy consumption/ carbon emissions levels. 72% (165 out of 228) of the respondents in the regional and mini forums made no comment on whether they knew their energy consumption/carbon emissions level.
- 4.2.7.2 In general, 29% (197 out of 685)²³ of respondents did not conduct carbon audits in their own housing estate/workplace or made no comment (58% - 395 out of 685 respondents) on it. However, 13% (93 out of 685) of respondents had conducted a carbon audit before in their own housing estate/workplace. Some respondents had considered conducting a carbon audit (25% - 165 out of 657)²⁴ as it would help reduce energy consumption, protect the environment, and hence reduced electricity operating costs (TU=62); and these reasons also applied to those who had already conducted carbon audits in their offices. However, 20% (134 out of 657) of the respondents had not considered conducting a carbon audit, and 55% (358 out of 657) of the respondents did not comment on whether they would or would not consider conducting a carbon audit. For those respondents who had not considered conducting a carbon audit (20% - 134 out of 657), their reasons were that the audit was time and cost consuming (TU=64) since it was a complicated process to collect the necessary data and information. Some respondents also mentioned that it was hard for them to get consensus from all the residents in the buildings (TU=11). Some respondents did not have the authority to conduct a carbon audit as they were not the owners (TU=8), and therefore even if they wanted to conduct a carbon audit, they could not do so.
- 4.2.7.3 In general, 58% (338 out of 587)²⁵ of the respondents would like to understand more about the carbon emissions levels of their buildings and possible ways to reduce energy consumption while 3% (18 out of 587) of the respondents did not want to understand more

²² Refers to Table A4.14 in Appendix 4 and Table A5.7 in Appendix 5.

²³ Refers to Table A4.16 in Appendix 4.

²⁴ Refers to Table A4.17 in Appendix 4.

²⁵ Refers to Table A4.15 in Appendix 4.

about their carbon emissions level. 39% (231 out of 587 respondents) of respondents made no comment at all.

4.2.7.4 In general, about 57% (302 out of 530)²⁶ of the respondents agreed energy/carbon audit was an effective way to identify deficiencies and improve opportunities for implementing appropriate energy saving measures. Energy/carbon audits could identify new opportunities for these users to save energy (TU=22). Also, through conducting energy/carbon audits, the public would have a deeper understanding of their energy consumption behaviours (TU=4) as it was important for evaluating their carbon footprint.

Concerns

4.2.7.5 One of the concerns raised by the respondents was that there were a number of free carbon calculation tools, but they were not widely used because of limited resources and time implications to businesses arising from an extensive assessment of their operations (TU=134), particularly small and medium enterprises. Also, respondents (TU=48) were concerned that there was a lack of understanding of energy/carbon audit, such as confusion over the terms “energy audit” and “carbon audit.” They were not sure about the differences and similarities between them. Also, certain obstacles were identified from the collected views that energy/carbon audits are not an effective means to promote energy efficiency if the general public did not act on it and if there was no concrete timeframe for implementation of the resulting suggestions (TU=7).

Suggestions

4.2.7.6 Since energy/carbon audits were still not popular and widely adopted in Hong Kong, respondents suggested the Government should first take the lead in practicing low carbon management (TU=207) by requiring all departments, educational institutes, and other facilities to conduct regular energy/carbon audits, report the results, and, where appropriate, set reduction targets in order to serve as a role model to the public (TU=18). Large corporations and listed companies also needed to take a lead to contribute more to the environment (TU=104) in fulfilling their corporate social responsibility (TU=14). Respondents’ choices were mainly due to the fact that the Government and large corporations had sufficient resources in terms of manpower and capital to conduct energy/carbon audits (TU=6).

²⁶ Refers to Table A4.18 in Appendix 4.

4.2.7.7 Incentives should be available from the Government and other organisations to facilitate carbon audits; most respondents suggested financial assistance would help the most (TU=144), while some suggested support such as seminars and trainings for engineers and professionals would also help facilitate the use of carbon audits (TU=108). Recognition such as awards and certificates could also be given to those who had completed a carbon audit with good performance (TU=58).

4.2.7.8 A lot of valuable recommendations on energy/carbon audits were made by the respondents, such as guidance can be provided from the Government, EMSD and EPD in order to facilitate quicker implementation while details on consumption data could be provided by the electricity companies (TU=40). Also, the Government should implement compulsory energy/carbon audits in accordance with the BEC (TU=27), and the financial supports should not be restricted to multi-owned buildings only but to all buildings (TU=6). Also, benchmarking existing energy/carbon audits with international standards would make the energy/carbon audits more informative and effective (TU=4).

4.2.8 Better Understanding of Your Energy Consumption

Perceptions

4.2.8.1 Respondents suggested more information should be included in their electricity bills in order to help them understand their consumption habits and reduce their electricity consumption (TU=5)²⁷ though some (TU=19) did think the information currently presented in the electricity bill is already sufficient.

Concerns

4.2.8.2 Respondents would like to have a detailed breakdown of the energy consumption by individual electrical appliance. However, this could not be done unless there was an installation of a smart meter which would generate such detailed data on the energy consumption of major electrical appliances (TU=116).

Suggestions

4.2.8.3 Respondents suggested that some additional information should be included on electricity bills; for instance, a breakdown of energy consumption should be shown such as peak hour/daily/monthly/annual electricity consumption as well as the amount paid per capita

²⁷ Refers to the Table A5.8 in Appendix 5.

and per square-meter/foot (TU=403). Benchmarks by average household size should be shown for both energy consumption and the amount paid (TU=225). It was suggested that these types of information should be presented in a simple and easy-to-read manner (TU=58) so that they could grasp the meaning easily at first glance like a bar chart or pie chart (TU=307) or in table form, which could show the details of energy consumption and the amount paid (TU=20). Besides, respondents suggested that, in order to better understand carbon emission levels (TU=86), an illustration of the number of trees to be planted to offset the corresponding carbon emissions or the household's carbon footprint should be included on bills, and some suggested emoticons like a smiley face icon could signify below average energy consumption (TU=70).

4.2.8.4 Some respondents suggested printing green tips and slogans such as “Save Energy, Save Money” in order to increase awareness of the need to reduce energy consumption (TU=107). Also, energy consumption trends could be presented in an encouraging and discouraging way like a warning message in red could be printed on the electricity bill if there was an increasing trend of energy consumption compared to the previous month, and complimentary words could encourage households that reduced energy consumption. (TU=41).

4.2.8.5 One common suggestion was to adopt electronic billing which could help users download their consumption profile and precise consumption data via the Internet and would facilitate their control over their consumption (TU=96).

4.2.9 Using Energy Efficiency Management System (EMS)

Perceptions

4.2.9.1 Respondents perceived there were different ways to promote the adoption of EMS tools/technologies in buildings and provide incentives for the developers and property management companies to adopt EMS in buildings in order to increase awareness and understanding of energy consumption (TU=7)²⁸ and help building occupiers optimise the building systems to reduce carbon emissions (TU=2).

²⁸ Refers to the Table A5.9 in Appendix 5.

Concerns

4.2.9.2 Some respondents did not quite understand the details of EMS and how they could benefit from it (TU=7). Concerns were raised that there was a lack of incentives to use such a system (TU=3).

Suggestions

4.2.9.3 The respondents suggested proper advertising and promotion were needed to promote the adoption of EMS such as through billboards and television ads (TU=53). Also, seminars and workshops could be arranged in order to further enhance building managers' knowledge and skills in terms of the benefits and costs of adopting EMS (TU=37). In addition to that, it was suggested that the benefits of adopting EMS should be promoted with concrete examples and data in order to increase awareness among building management teams (TU=13). Many suggested that incentives and assistance should be provided by the Government such as giving financial subsidies (TU=61), awards, and certificates to those who adopt EMS in their buildings (TU=41) and providing technical assistance (TU=20). Some suggested regulations should be imposed in order to promote the adoption of EMS effectively (TU=38). Besides, a review and assessment of existing building design and structure could help promote the adoption of EMS by having a better design and implementation of the energy saving system for various types of buildings (TU=31).

4.2.10 Promoting the Adoption of Energy-Efficient Electrical Appliances among the Trades

Perceptions

4.2.10.1 Almost half of the respondents (48% - 258 out of 541)²⁹ agreed that there should be more investment in the research and development of energy-efficient electrical appliances for local trade use in order to increase the competition in the market for energy-efficient electrical appliances and hence allow the end users to have a wider variety of choices at lower prices (TU=30). Some respondents thought it would help reduce energy consumption and protect the environment (TU=23). However, some had reservations about agreeing (4% - 24 out of 541 respondents) due to the fact that the development of energy-efficient electrical appliances for local trade use could be done by market competition instead of investing more in research and development (TU=8). Besides, respondents

²⁹ Refers to Table A4.19 in Appendix 4 and Table A5.10 in Appendix 5.

thought the existing market was already sufficiently funded (TU=5). Some respondents mentioned they did not understand the issue (TU=4), and 48% (259 out of 541) of total respondents neither agreed nor disagreed or had no comment regarding whether there should be more investment in the development of energy-efficient electrical appliances for local trade use.

Concerns

4.2.10.2 Some respondents perceived that Hong Kong did not have enough expertise in this area (TU=14). On the other hand, some perceived that simply investing more capital and effort in the development of energy-efficient electrical appliances was not effective (TU=6). Also, some respondents were concerned about the lack of information about and awareness of energy-efficient appliances (TU=4).

Suggestions

4.2.10.3 Respondents suggested that the Government should encourage investments in research and development for energy-efficient electrical appliances through various funding schemes as it was not purely for the benefit of energy saving but also served as an incentive for innovation in other areas as well in the future (TU=20). On the other hand, it was suggested by some respondents that the Government could step up publicity and dissemination of information on energy-efficient electrical appliances to enhance awareness and make more choices available for local trade use (TU=19). Some respondents who were concerned with the cost-effectiveness of such investment suggested that collaborating with pioneering countries in this area would facilitate knowledge and experience sharing and allow for better local implementation (TU=15). Respondents also suggested EMSD should take the lead, along with the cooperation of manufacturers and universities in studying the feasibility of local adoption of different energy-efficient appliances from abroad. It was also suggested that verification and validation of existing electrical appliance usages could also build up consumer confidence for purchasing such appliances instead of investing in development (TU=4). Respondents suggested the best way to provide information on research and development and the marketing of the electrical appliances is through the media (TU=105), the Internet (TU=74), leaflets/magazines (TU=24), seminars and workshops (TU=13), and schools and textbooks (TU=12).

4.2.11 Reviewing the Electricity Tariff Structure

Perceptions

4.2.11.1 Almost half of the respondents (48% - 283 out of 587)³⁰ agreed restructuring the electricity tariff could facilitate behaviour change and achieve energy savings though there was no apparent consensus on whether to implement a progressive or regressive tariff structure due to the complexity of the power industry in Hong Kong. 3,633 respondents³¹ from a street survey supported reviewing the electricity tariff structure but did not state whether reviewing the electricity tariff structure would facilitate behaviour change. Some respondents agreed that reviewing the existing electricity tariff structure would facilitate further reductions in energy consumption (TU=34) and hence the cost of electricity as well as increase awareness of the need to reduce energy consumption (TU=21). Some disagreed (7% - 39 out of 587) because they thought that reviewing the tariff structure would not be effective in changing people's behaviour (TU=18). Also, some respondents perceived it would cause them to pay more for electricity and increase the financial burden on low-income families (TU=17). 45% (265 out of 587) of the respondents neither agreed nor disagreed or had no comment on whether reviewing the electricity tariff structure would facilitate behaviour change.

4.2.11.2 4,566 respondents³² submitted their views that there was a need to review the electricity tariff structure because it would help protect the environment and next generation (TU=1,196), reduce energy consumption and costs (TU=1,051), and be more fair to all users (TU=278).

Concerns

4.2.11.3 Some respondents were concerned that adopting a progressive tariff structure for all sectors would not be appropriate since some sectors might require more electricity due to the nature of their business. Therefore, the feasibility of implementing a progressive electricity tariff structure for all sectors remained uncertain (TU=21). Also, it was controversial whether the electricity tariff structure should charge different rates during peak and non-peak hours since it was difficult to have a general consensus on the definition of "peak hours" and "non-peak hours." Respondents felt that adopting a time-of-use (TOU) tariff structure to reduce energy consumption is not feasible (TU=7).

³⁰ Refers to Table A4.20 in Appendix 4 and Table A5.11 in Appendix 5.

³¹ There are 933 mass identical emails and 3,633 mass submissions of the same street survey commenting only on the Issue of "Reviewing the Electricity Tariff Structure."

³² Comprising 3,633 submissions in mass surveys conducted online or on the street by Greenpeace Hong Kong in November 2011 and 933 identical submissions received via email.

Suggestions

4.2.11.4 Even though there was no apparent consensus on which tariff structure should be adopted, some respondents suggested the progressive tariff structure should be adopted (TU=1,074),³³ and some of their suggestions criticised the regressive tariff structure because it actually facilitated higher energy consumption (TU=939).³⁴ It was suggested that education on the existing tariff structure and the costs and benefits of other tariff structures should also be provided by the Government (TU=26). Some respondents suggested reviewing the incentives and assistance provided by the Government such as tax and rate reductions for users with high energy efficiency (TU=25). Also, respondents would like a more comprehensive review of the existing tariff structure that takes reference of other countries' practices and innovations (e.g. smart meters and smart grid systems) (TU=19). A few respondents mentioned the progressive tariff structure should be based on energy efficiency or energy intensity (e.g. per square foot) instead of the total amount of energy consumption since some bulk users consumed more energy than others, but their consumption might be more efficient as well (TU=2).

³³ Same as previous footnote.

³⁴ The 939 text units included 933 text units from mass identical emails supporting the adoption of a progressive tariff structure instead of a regressive tariff structure.

4.3 OTHER VIEWS ³⁵

4.3.1 More Education and Promotion

4.3.1.1 Some respondents (TU=60) suggested that enhancing the public's awareness by providing more education and promotion is important in order to further raise awareness of the problems related to climate change. Education and promotion on the reasons and methods of systemic enhancement as well as adopting measures that facilitate behaviour change play an important role in combating climate change.

4.3.2 Importance of Reducing Excessive External Lighting

4.3.2.1 Some respondents (TU=24) commented that in order to reduce energy consumption effectively, the regulation of signboards was necessary. They further elaborated that the public would consume less electricity for air-conditioning if there was less heat generated by such signboards outside their buildings. Commercial lighting systems such as billboards, decoration lighting, and display spotlights should be turned off after certain hours at night, except those used for safety or security reasons. Also, some respondents suggested financial penalties should be imposed for violations. Any money received from the penalty can be deposited into an environmental fund.

4.3.3 Alternative Energy Sources should be Considered

4.3.3.1 Some respondents (TU=25) expressed their views that the issues put forward in the IR document emphasised demand-side management, though the possibility of using hydrogen and solar energy had been suggested in some of the data sources. Respondents thought that demand-side management and supply-side management were both important in promoting the reduction of electricity consumption. They mentioned many demand-side management measures had been proven effective, but there was insufficient data and research available about the situation in Hong Kong. Therefore, they thought both demand-side and supply-side management should be taken forward in a holistic approach to promote energy efficiency and conservation. Some respondents also commented that due to increasing economic development and technological advancement, an increase in electricity consumption is unavoidable as our living standards continue to rise. Hence, finding alternative energy sources was becoming more important.

³⁵ Refers to Table A5.12 in Appendix 5.

4.3.4 The Measures should be Focused on Bulk Users

4.3.4.1 Respondents (TU=20) expressed that, since bulk users had the highest energy consumption, any suggested measures that targeted their consumption would be more effective in reducing energy consumption along with a policy of encouraging domestic unit occupants to save energy.

Chapter 5 CONCLUDING REMARKS

- 5.0.1 With reference to other advanced countries such as Canada and Australia, Hong Kong had a slow start on reducing carbon emissions. The overall collected views from the data sources showed that there was a lack of understanding and awareness of the proposed issues recommended in the IR document to combat climate change. After analysing all collected views from all data sources, a general theme emerged that the Government needs to implement three different levels of education and promotion plans along with providing additional help and expertise from professional organisations and consultancies in order to further promote and implement the proposed issues.
- 5.0.2 The first priority among all suggestions is to provide more education in order to increase the awareness of the public. The Government should make the best use of public media, including television advertisements and the Internet to draw the attention of the community to the issue of climate change.
- 5.0.3 Furthermore, the Government needs to review existing schemes and policies designed to combat climate change and modify and update them as necessary. Experts from professional organisations and consultancies should periodically review these schemes and policies with reference to the experiences of other countries.
- 5.0.4 More importantly, the policy resolution of the Government plays a crucial role in combating climate change. Though laissez-faire market economics has prevailed, in order to implement a comprehensive and holistic climate change policy effectively, compromises among sectors should be made with the help of the Government through providing incentives and education to the community.

Appendix 1 LIST OF ENGAGEMENT AND PUBLICITY EVENTS

Table A1.1 List of Engagement Events

| No. | Date and Time | Name of Event | Venue | Estimated No. of Participants (Total 1,274) |
|-----|---------------------------------------|---|---|---|
| 1. | 16 Aug 2011 (Tue) 2:15pm-5:45pm | 1st Regional Forum – New Territories East | Sha Tin Town Hall, 1 Yuen Wo Road, Sha Tin | 29 |
| 2. | 20 Aug 2011 (Sat) 9:30am –1:00pm | The Hong Kong Institute of Architects (HKIA) Forum | Room S428, Level 4, Hong Kong Convention and Exhibition Centre, Wan Chai | 104 |
| 3. | 26 Aug 2011 (Fri) 11:45am–1:00pm | Briefing for 18 District Council Chairmen/Vice-Chairmen | Home Affairs Department Headquarters, 30/F Conference Room, Southorn Centre, 130 Hennessy Road, Wanchai | 26 |
| 4. | 26 Aug 2011 (Fri) 12:45pm-3:00pm | Briefing for the Real Estate Developers Association of Hong Kong (REDA) | Room 1403, 14/F, Worldwide House, Central | 14 |
| 5. | 30 Aug 2011 (Tue) 6:45pm–9:45pm | 2nd Regional Forum – Hong Kong Island | Leighton Hill Community Hall, 133 Wong Nai Chung Road, Happy Valley | 50 |
| 6. | 1 Sep 2011 (Thu) 3:00pm-4:00pm | Hong Kong General Chamber of Commerce (HKGCC) Forum | Chamber Theatre, 22/F United Centre, 95 Queensway, Admiralty | 81 |
| 7. | 5 Sep 2011 (Mon) 4:00pm-5:00pm | Briefing for Business Environment Council (BEC) and Climate Change Business Forum (CCBF) | BEC Auditorium, Jockey Club Environmental Building, 77 Tat Chee Avenue, Kowloon Tong | 30 |
| 8. | 9 Sept 2011 (Fri) 9:30am-10:30am | Briefing for Building Subcommittee of the Land and Development Advisory Committee (LDAC) | Building Department Conference Room, 18/F Pioneer Center, 750 Nathan Road, Mong Kok | 26 |
| 9. | 19 Sept 2011 (Mon) 11:00am-12:30pm | Event on "Policy Tools for Green Growth – how to stimulate a green building economy" jointly organised by The British Consulate-General, Civic Exchange and Climate Change Business Forum | 1/F, British Consulate-General, 1 Supreme Court Road, Admiralty | 57 |
| 10. | 24 Sept 2011 (Sat) 9:15am-12:45pm | 3rd Regional Forum – Kowloon West cum Launch of Carbon Manager | Mong Kok Community Hall, L2, Mong Kok Complex, 557 Shanghai Street, Mong Kok | 49 |
| 11. | 11 Oct 2011 (Tue) 9:15am–12:45pm | 4th Regional Forum – New Territories West | Tsuen Wan Town Hall, 72 Tai Ho Road, Tsuen Wan | 93 |
| 12. | 13 Oct 2011 (Thu) 7:00pm-8:00pm | Training delivered by Programme Director to student facilitators in Mini Forum organised by The Open University of Hong Kong | 101H, Homantin Plaza Learning Centre, OUHK Homantin campus, Homantin | 15 |
| 13. | 17 Oct 2011 (Mon) 2:30pm-3:30pm | Briefing for Advisory Council on the Environment | Conference Room, 33/F, Revenue Tower, Wan Chai | 14 |
| 14. | 24 Oct 2011 (Mon) 2:30pm-3:30pm | Briefing for Panel on Environmental Affairs, Legislative Council | Conference Room 1, Legislative Council Complex, Tamar | 15 |

| No. | Date and Time | Name of Event | Venue | Estimated No. of Participants (Total 1,274) |
|------------|--|--|---|--|
| 15. | 26 Oct 2011 (Wed) 6:15pm-7:15pm | Briefing for The Hong Kong Institution of Engineers (HKIE) | Seminar Room CD 309, The Hong Kong Polytechnic University, Hung Hom | 70 |
| 16. | 28 Oct 2011 (Fri) 10:00am-11:30am | Briefing for Energy Efficiency and Conservation Subcommittee (EE&C) | Conference Room, 33/F, Revenue Tower, 5 Gloucester Road, Wan Chai | 29 |
| 17. | 10 Nov 2011 (Thu) 7:00pm-9:00pm | Mini Forum organised by The Open University of Hong Kong | A1217, OUHK Homantin campus, Homantin | 42 |
| 18. | 11 Nov 2011 (Fri) 2:15pm-5:45pm | 5th Regional Forum – Kowloon East | Sai Tso Wan Neighborhood Community Centre, 81 Cha Kwo Ling Road, Kwun Tong | 58 |
| 19. | 15 Nov 2011 (Tue) 11:30am-2:00pm | Talk organised by Department of Science and Environmental Studies, The Hong Kong Institute of Education | D1-LP-03, HKIEd Tai Po campus, 10 Lo Ping Road, Tai Po | 57 |
| 20. | 18 Nov 2011 (Fri) 2:30pm-3:15pm | Briefing for Inter-departmental Working Group on Climate Change (IWGCC) | Conference Room 2, G/F, Central Government Offices, 2 Tim Mei Avenue, Tamar | 15 |
| 21. | 22 Nov 2011 (Tue) 10:00am-11:15am | Briefing for St. James' Settlement Green Committee | 7/F, No. 85 Stone Nullah Lane, Wan Chai | 15 |
| 22. | 23 Nov 2011 (Wed) 9:30am-11:00am | Seminar for NT West Elder Academies Cluster organised by Lingnan University | Yan Chai Hospital No. 2 Secondary School, Area 31, Yeung Tsing Road, Tuen Mun | 138 |
| 23. | 24 Nov 2011 (Thu) 4:30pm-6:30pm | Seminar organised by Li Ka Shing Institute of Professional and Continuing Education (LiPACE), The Open University of Hong Kong | T18, 4/F, Shun Tak Centre, 168-200 Connaught Road Central, Sheung Wan | 68 |
| 24. | 28 Nov 2011 (Mon) 2:30pm-4:30pm | Briefing for Business Facilitation Advisory Committee (BFAC) | Conference Room 6, G/F, Central Government Offices, 2 Tim Mei Avenue, Tamar | 26 |
| 25. | 29 Nov 2011 (Tue) 10:00am-12:00noon | Briefing at The Hong Kong Polytechnic University | Lecture Theater Y306, Block Y, The Hong Kong Polytechnic University, Hung Hom | 30 |
| 26. | 29 Nov 2011 (Tue) 5:00pm-6:00pm | Talk for MTR Corporation – Environmental Community of Practice (COP) | Auditorium, Level 2, MTR Tower, 33 Wai Yip Street, Kowloon Bay | 40 |
| 27. | 1 Dec 2011 (Thu) 7:30pm-9:00pm | Briefing for Chartered Institute of Housing Asia Pacific Branch (CIHAPB) | Function Room AC2, 4/F, Administration Building, Hong Kong Cultural Centre, Tsim Sha Tsui | 80 |
| 28. | 2 Dec 2011 (Fri) 2:30pm-4:00pm | Briefing for catering and SMEs sector | Committee Room IV, Queen Elizabeth Stadium, Wan Chai | 3 |

Table A1.2 List of Engagement and Publicity Events – School Talks

| No. | Date and Time | Name of Event | Venue | Estimated No. of Participants (Total 1,680) |
|------------|--------------------------------------|--|---|--|
| 1. | 20 Oct 2011 (Thu) 3:10pm-4:20pm | School Outreach Programme - Briefing at School Workshop (Caritas Ma On Shan Secondary School) | 2 Kam Ying Road Ma On Shan, Shatin | 70 |
| 2. | 27 Oct 2011 (Thu) 11:10am-11:50am | School Outreach Programme - Briefing at School Talk (Holy Carpenter Secondary School) | 10 Tai Wan Road, Hung Hom | 350 |
| 3. | 27 Oct 2011 (Thu) 3:10pm-4:10pm | School Outreach Programme - Briefing at School Talk (CCC Yenching College) | 12 Nga Ying Chau Street, Tsing Yi | 600 |
| 4. | 14 Nov 2011 (Mon) 10:50am-11:40am | School Outreach Programme - Briefing at School Talk (St. Paul's College) | 67-69 Bonham Road, Hong Kong | 160 |
| 5. | 16 Nov 2011 (Wed) 2:15pm-3:30pm | School Outreach Programme - Briefing at School Talk (Kowloon Technical School) | 332-334 Cheung Sha Wan Road, Shamshuipo | 160 |
| 6. | 23 Nov 2011 (Wed) 1:35pm-3:05pm | School Outreach Programme - Briefing at School Talk (CCC Fung Leung Kit Memorial Secondary School) | 22 Plover Cove Road, Tai Po | 140 |
| 7. | 1 Dec 2011 (Thu) 3:45pm-4:45pm | School Outreach Programme - Briefing at School Talk (Wa Ying College) | 8 Sheung Wo Street, Homantin | 200 |

Appendix 2 QUESTIONS FOR REGIONAL FORUM AND VIEWS COLLECTION FORMS (VCFs)

Table A2 Questions for Regional Forum and Views Collection Forms (VCFs)

| Issues | Data Sources | Qu. No. | Regional Forum | Views Collection Forms (Original) | Views Collection Forms (Simplified – School talks) | Views Collection Forms (Simplified - Elderly) |
|--------|------------------------|---------|--|--|---|---|
| | | | | | | |
| 0 | Climate Change and You | 0.1 | Is climate change affecting you and the way you live? Any examples. | What does climate change mean to you? | How does climate change affect your life? | How does climate change affect your life? |
| | | 0.2 | N/A | Do you think you can contribute to the Government's proposed target of reducing Hong Kong's carbon intensity by 50%-60% in 2020 as compared with the 2005 level? If yes, what measures would you take? If no, why not? | The Government proposed to reduce carbon emission in the next 20 years. As a part of Hong Kong, do you think you can cooperate with the Government? | The Government proposed to reduce carbon emission in the next 20 years. As a part of Hong Kong, do you think you can cooperate with the Government? |
| | | 0.3 | N/A | N/A | Have you heard of "Climate Change"? | Have you heard of "Climate Change"? |
| | | 0.4 | N/A | N/A | Have you heard of "Carbon Emission"? | Have you heard of "Carbon Emission"? |
| 1 | Tightening of the BEC | 1.1 | Are you aware that 4 types of installations (lighting, air conditioning, electrical and lift & escalator) are required by law to meet certain energy efficiency standards? | N/A | N/A | N/A |
| | | 1.2 | Do you agree that we should tighten the energy efficiency standards for the 4 building services installations covered by the BEC? | Do you agree that we should tighten the energy efficiency standards for the four building services installations (lighting, air conditioning, electrical and lift & escalator) covered by the BEC? | N/A | N/A |
| | | 1.3 | Do you think that the BEC should cover other types of building services installations? If yes, what are they? | Do you think that the BEC should cover other types of building services installations? If yes, what are they? | N/A | N/A |

| Issues | Data Sources | Qu. No. | Regional Forum | Views Collection Forms (Original) | Views Collection Forms (Simplified – School talks) | Views Collection Forms (Simplified - Elderly) |
|--------|---|---------|--|--|---|---|
| | | | | | | |
| 2 | Providing Recognition for High Energy-Efficient Buildings | 2.1 | Do you think energy-efficient buildings should be recognised by the government or other institutions through award / labelling scheme? | Do you think energy-efficient buildings should be recognised by the government or other institutions through award/labelling scheme? | N/A | N/A |
| | | 2.2 | What kind of elements (e.g. estimated/actual energy performance, housekeeping practices, innovative measures, etc.) should be included in the assessment? | What kind of elements (e.g. estimated/actual energy performance, housekeeping practices, innovative measures, etc.) should be included in the assessment? | N/A | N/A |
| 3 | Exploring the Extension of the Application of the MEELS | 3.1 | Are you aware that some electrical appliances are attached with energy efficiency labels? Do you find these labels useful? | N/A | Have you heard of or notice “energy efficiency labels”? | Have you heard of or notice “energy efficiency labels”? |
| | | 3.2 | Will you consider installing energy-efficient electrical appliances even if their price may be higher than the energy-inefficient ones? If yes, why? If no, why not? | Will you consider installing energy-efficient electrical appliances even if their price may be higher than the energy-inefficient ones? If yes, why? If no, why? | Will you suggest your family installing energy-efficient electrical appliances even if their price may be higher than the energy-inefficient ones? If yes, why? If no, why? | Will you suggest your family installing energy-efficient electrical appliances even if their price may be higher than the energy-inefficient ones? If yes, why? If no, why? |
| | | 3.3 | Do you agree that we should introduce more electrical appliance under the MEELS? | Do you agree that we should introduce more electrical appliance under the MEELS? | Do you agree that electrical appliance should obtain the “Energy Saving Label” before it can be sold in the market? | Do you agree that electrical appliance should obtain the “Energy Saving Label” before it can be sold in the market? |
| | | 3.4 | N/A | N/A | N/A | Do you understand the purpose of the "Energy Efficiency Labeling Scheme" |
| | | 3.5 | N/A | N/A | N/A | Is energy efficiency your top priority when purchasing new electrical appliances? |

| Issues | Data Sources | Qu. No. | Regional Forum | Views Collection Forms (Original) | Views Collection Forms (Simplified – School talks) | Views Collection Forms (Simplified - Elderly) |
|--------|---|---------|---|---|--|--|
| | | | | | | |
| 4 | Tightening up the Energy Efficiency Grading Levels for Room Air Conditioners and Refrigerators under the MEELS | 4.1 | Do you think there is a need to tighten up / revisit the grading levels under MEELS, particularly for room air conditioners and refrigerators which consume a considerable amount of electricity? | Do you think there is a need to tighten up/revisit the grading levels under the MEELS, particularly for room air conditioners and refrigerators which consume a considerable amount of electricity? | There are currently grading levels under the MEELS, would you consider there is a need to adjust it? | There are currently grading levels under the MEELS, would you consider there is a need to adjust it? |
| 5 | Phasing Out Energy-Inefficient Incandescent Light Bulbs | 5.1 | Are you using energy-efficient light bulbs at your home or workplace? If yes, what's the result? If no, why not? | Are you using energy-efficient light bulbs at your home or workplace? If yes, what's the result? If no, why not? | Are you using energy-efficient light bulbs at your home? If yes, what's the result? If no, why not? | Are you using energy-efficient light bulbs at your home? If yes, what's the result? If no, why not? |
| | | 5.2 | Do you think we should restrict the supply of energy-inefficient incandescent light bulbs in Hong Kong as in some overseas jurisdictions? | Do you think we should restrict the supply of energy-inefficient incandescent light bulbs in Hong Kong as in some overseas jurisdictions? | Do you think we should restrict the supply of energy-inefficient incandescent light bulbs in Hong Kong as they are highly power-consuming? | Do you think we should restrict the supply of energy-inefficient incandescent light bulbs in Hong Kong as they are highly power-consuming? |
| | | 5.3 | N/A | N/A | N/A | Have you used energy-inefficient incandescent light bulbs? (E.g. Altar lamp, Quartz lamp) |
| | | 5.4 | N/A | N/A | N/A | Is energy efficiency your top priority when purchasing light bulbs? |
| 6 | Phasing Out Energy-Inefficient Electrical Installations/ Appliances | 6.1 | Should we consider imposing minimum energy performance standards for electrical appliances? If yes, on what type of appliances? | Should we consider imposing minimum energy performance standards for electrical appliances? If yes, on what type of electrical appliances? | N/A | N/A |
| | | 6.2 | N/A | N/A | Should we phase out energy-inefficient electrical appliances? If yes, what energy-inefficient electrical appliance(s) you think we should phase out? | Should we phase out energy-inefficient electrical appliances? If yes, what energy-inefficient electrical appliance(s) you think we should phase out? |

| Data Sources Issues | Qu. No. | Regional Forum | Views Collection Forms (Original) | Views Collection Forms (Simplified – School talks) | Views Collection Forms (Simplified - Elderly) |
|---|---------|--|--|---|---|
| | | | | | |
| 7 Energy/ Carbon Audit | 7.1 | Do you know your own energy consumption/carbon emission? Have you heard of energy/carbon audit? | N/A | N/A | N/A |
| | 7.3 | Has carbon audit been conducted in your own housing estate/workplace? | Has carbon audit been conducted in your own housing estate/workplace? | N/A | N/A |
| | 7.4 | Have you ever considered conducting carbon audit on any premises/building? If yes, what were your considerations? If no, why not and what were the obstacles? | Have you ever considered conducting carbon audit in any premises/building? If yes, what were your considerations? If no, why not and what are the obstacles? | N/A | N/A |
| | 7.2 | Do you want to understand more about the carbon emission level in your building and possible ways to reduce energy consumption? | Do you want to understand more about the carbon emission level in your building and possible ways to reduce energy consumption? | N/A | N/A |
| | 7.5 | Is energy/carbon audit conducive to identification/implementation of appropriate energy saving measures? | Is energy/carbon audit conducive to identification, implementation of appropriate energy saving measures? | N/A | N/A |
| | 7.6 | What kind of assistance or incentives should be available from the Government or other organisations to facilitate carbon audits? | What kind of assistance or incentives should be available from the Government or other organisations to facilitate carbon audits? | N/A | N/A |
| | 7.7 | Which kind of organisation(s) should take the lead in conducting energy / carbon audit, e.g. government departments / large corporations / listed companies / small and medium enterprises etc.? | Which kind of organisation(s) should take the lead in conducting energy/ carbon audit, e.g. government departments/large corporations/ listed companies/small and medium enterprises etc.? | N/A | N/A |
| 8 Better Understanding of Your Energy Consumption | 8.1 | Do you read your electricity bill in detail? | N/A | Do you read your electricity bill? | Do you read your electricity bill? |
| | 8.2 | What kind of information should be provided in our electricity bills in order to facilitate electricity saving? | What kind of information should be provided in our electricity bills? | What kind of information should be provided in our electricity bills in order to help electricity saving? | What kind of information should be provided in our electricity bills in order to help electricity saving? |
| | 8.3 | What kind of presentation style do you prefer? | What kind of presentation style do you prefer? | If you were to design an electricity bill, what kind of presentation style do you prefer? | If you were to design an electricity bill, what kind of presentation style do you prefer? |

| Issues | Data Sources | Qu. No. | Regional Forum | Views Collection Forms (Original) | Views Collection Forms (Simplified – School talks) | Views Collection Forms (Simplified - Elderly) |
|--------|---|---------|---|---|--|--|
| | | | | | | |
| 9 | Using Energy Efficiency Management System (EMS) | 9.1 | How should we promote the adoption of EMS / tools / technologies in buildings? | How should we promote the adoption of EMS / tools / technologies in buildings? | N/A | N/A |
| | | 9.2 | What kind of incentives should be provided for the developers/property management companies etc. to adopt EMS in buildings? | What kind of incentives should be provided for the developers/property management companies etc. to adopt EMS in buildings? | N/A | N/A |
| | | 9.3 | N/A | N/A | Have you heard of or notice the “smart energy efficient escalators”? | Have you heard of or notice the “smart energy efficient escalators”? |
| | | 9.4 | N/A | N/A | Have you heard of or notice the “smart energy efficient light system”? | Have you heard of or notice the “smart energy efficient light system”? |
| | | 9.5 | N/A | N/A | Do you think that Hong Kong should promote using these smart energy efficient devices? | Do you think that Hong Kong should promote using these smart energy efficient devices? |
| 10 | Promoting the Adoption of Energy-Efficient Electrical Appliances among the Trades | 10.1 | In your experience, what kind of high energy-efficient electrical appliances/products are most difficult to source? | N/A | N/A | N/A |
| | | 10.2 | Do you think that there should be more investment on research & development (R&D) for energy-efficient electrical appliances for local trade use? | Do you think that there should be more investment on research/development (R&D) for energy-efficient electrical appliances for local trade use? | N/A | N/A |
| | | 10.3 | What would be the best way for you to obtain information on R&D and marketing of such appliances? | What would be the best way to provide information on R&D and the marketing of such electrical appliances for you? | N/A | N/A |

| | Data Sources Issues | Qu. No. | Regional Forum | Views Collection Forms (Original) | Views Collection Forms (Simplified – School talks) | Views Collection Forms (Simplified - Elderly) |
|----|---|------------|---|---|---|---|
| | | | | | | |
| 11 | Reviewing the Electricity Tariff Structure | 11.1 | Do you think the restructuring of electricity tariff can facilitate behaviour change and achieve energy saving? | Do you think the restructuring of electricity tariff can facilitate behaviour change and achieve energy saving? | N/A | N/A |
| | | 11.2 | N/A | N/A | N/A | Do you agree the electricity tariff structure of "the more the electricity unit consumed, the higher the charge on each electricity unit; and charging more during the usage peak hour"? Why? |
| 12 | Other | 12.1 | Other opinions and suggestions | Other comments and suggestions | N/A | Can you suggest some tips for energy saving and carbon reduction in daily life? |

Appendix 3 LIST OF PROFILE CLASSIFICATIONS

Table A3 List of Profile Classifications

| Public Authorities & Related Organisations | |
|---|--|
| Buildings Department (Technical Support Section) | Hong Kong Housing Department |
| Business Facilitation Advisory Committee | Hong Kong Observatory |
| Council for Sustainable Development | Hong Kong Productivity Council |
| District Councils | Inter-departmental Working Group on Climate Change |
| District Fire Safety Committee (Kwun Tong District) | Kwun Tong South Area Committee |
| District Fire Safety Committee (Wan Chai District) | Land and Development Advisory Committee |
| Electrical and Mechanical Services Department | Legislative Council |
| Energy Efficiency and Conservation Subcommittee | Tsuen Wan Kwai Ching District Women's Association |
| Home Affairs Department (Tsuen Wan District Office) | Urban Renewal Authority |
| Non-Government Organisations | |
| Breakthrough Limited | Mutual Aid Committees of Hon Pak House |
| Caritas Community Centre - Tsuen Wan | Mutual Aid Committees of Kwong Ching House |
| China Pacific Economic Cooperation CEO Forum | Mutual Aid Committees of Kwong Ngar House |
| Chinese YMCA of Hong Kong | Mutual Aid Committees of Tat Wah House |
| Friends of the Earth (HK) | Mutual Aid Committees of Wo Hang House |
| Green Power | Mutual Aid Committees of Yan Lai House, Yau Lai Estate |
| Green Sense | No Emission Monday |
| Greenpeace | St. James' Settlement |
| HKPA Sai Tso Wan Children and Youth Centre | Sun On Building Owners' Committee |
| Hong Kong Christian Council | Tak Bo Garden Owners' Committee |
| Hong Kong Federation of Women's Centers | The Boys' and Girls' Clubs Association of Hong Kong (BGCA) |
| Hong Kong Playground Association | The Hong Kong Council of Social Service |
| Hong Kong Sheng Kung Hui Welfare Council | World Wide Fund for Nature – Hong Kong |
| Kadoorie Farm & Botanic Garden | Yan Oi Tong Community Centre |
| Mongkok Services Association | Western Building Energy Network |
| Education Sector | |
| Caritas Fanling Chan Chun Ha Secondary School | Queen's College |
| Caritas Ma On Shan Secondary School | Queen's College Old Boys' Association Secondary School |
| Carmel Divine Grace Foundation Secondary School | S.K.H. Li Ping Secondary School |
| CCC Tam Lee Lai Fun Memorial Secondary School | Sing Yin Secondary School |
| Chinese University of Hong Kong | Diocesan Girls' School |
| Chong Gene Hang College | St. Paul's College |
| City University of Hong Kong | The Chinese Foundation Secondary School |
| St Margaret's Co-educational English Secondary and Primary School | The Church of Christ in China Fung Leung Kit Memorial Secondary School |
| GCC & ITKD Lau Pak Lok Secondary School | The Church of Christ in China Yenching College |
| Good Hope School | The Hong Kong Academy for Performing Arts |
| HKICC Lee Shau Kee School of Creativity | The Hong Kong Institute of Education |
| Holy Carpenter Secondary School | The Hong Kong Polytechnic University |

| | |
|--|---|
| Queen Elizabeth School Old Students' Association Secondary School | The Hong Kong Taoist Association Ching Chung Secondary School |
| Hong Kong Baptist University | The Hong Kong University of Science & Technology |
| Hong Kong Red Cross Princess Alexandra School | The Jockey Club Eduyoung College |
| Korean International School | The Open University of Hong Kong |
| Leung Sing Tak College | The University of Hong Kong |
| Lingnan University | TIACC Woo Hon Fai Secondary School |
| Lions College | Tsuen Wan Public Ho Chuen Yiu Memorial College |
| Liu Po Shan Memorial College | United Christian Medical Service Nursery School |
| Lung Cheung Government Secondary School | Vocational Training Council |
| Pak Kau College | Wa Ying College |
| Po Leung Kuk Lee Shing Pik College | Wah Yan College, Kowloon |
| Po Leung Kuk Wu Chung College | Yan Chai Hospital Lim Por Yen Secondary School |
| Po Leung Kuk Yao Ling Sun College | Yan Chai Hospital No.2 Secondary School |
| Pok Oi Hospital Chan Hsu Fong Lam Kindergarten | Yan Oi Tong Tin Ka Ping Secondary School |
| Professional Organisations & Think Tanks | |
| 30SGroup | Hong Kong Institute of Engineers (HKIE) |
| Chartered Institute of Housing Asian Pacific Branch | Hong Kong Institute of Facility Management |
| Civic Exchange | Hong Kong Institute of Land Administration |
| Economic Synergy | Hong Kong Institute of Surveyors |
| Energy Institute (Hong Kong Branch) | Professional Green Building Council |
| Environmental Management Association of Hong Kong | Roundtable Institute and its Network |
| Building Services Operation and Maintenance Executives Society | The Chartered Institution of Building Services Engineers - Hong Kong Branch |
| Hong Kong Association of Energy Engineers | The Hong Kong Institute of Architects |
| Hong Kong Green Building Council | The Hong Kong Institute of Housing |
| Hong Kong Institute of Carbon Emission Reduction & Energy Management | The Institution of Engineering and Technology |
| Business Organisations | |
| Business Environment Council | New World Color Printing Company |
| Central Securities Corp. (CET) | Panda Hotel |
| China Light and Power Company Limited | Pioneer Management Limited |
| Echo LED Lighting Technology Limited | PlanArch Consultants Limited |
| EESCO P2E2 HK Limited | SA SA Cosmetic Company Limited |
| Hang Lung Real estate | Satay King |
| Holiday Inn Golden Mile Hong Kong | Sino Land Company Limited |
| Hong Kong Electric Company Limited | Sunny Lighting Hong Kong |
| Hong Kong Mass Transit Railway Corporation | Swire Pacific Limited |
| Hopewell Construction Company Limited | Swire Properties Limited |
| Hopewell Holdings Limited | Synergy Group |
| Hopewell Properties Limited | Telford Gardens Management Office |
| Institute of Dining Art | The British Consulate-General |
| K F Cafe & Restaurant | The Chinese Manufacturers' Association of Hong Kong |
| KITEC Management Limited | The Hong Kong and China Gas |

| | |
|--|---|
| Maxim's caterers Limited | The Hong Kong General Chamber of Commerce |
| ME Electronic Products Limited | The Jardine Engineering Corporation Limited |
| MegaBox Management Services Limited | The Real Estate Developers Association of Hong Kong |
| Meinhardt Infrastructure and Environment Limited | Universal Technology Network Limited |
| MGPA (Asia) Limited | Yau Lee Holdings Limited |
| General Public | |
| Elder Academy | General Public* |

**Any unclassified profiles would be put under "General Public".*

Appendix 4 SUMMARY OF RESPONSES TO CLOSE-ENDED QUESTIONS

Table A4.1 Summary of responses to "What does climate change mean to you?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total response no. & percentage |
| No. of Respondents | 232* | | 22 | 123 | 1,592 | 237 | 1,288 | 67 | 27 | 1,996 |
| Yes | No. | | 0 | 90 | 1,151 | 190 | 901 | 60 | 5 | 1,306 |
| | % | | 0% | 73% | 72% | 80% | 70% | 90% | 19% | 65% |
| No | No. | | 0 | 0 | 217 | 2 | 214 | 1 | 0 | 217 |
| | % | | 0% | 0% | 14% | 1% | 17% | 1% | 0% | 11% |
| N/A | No. | | 22 | 33 | 224 | 45 | 173 | 6 | 22 | 473 |
| | % | | 100% | 27% | 14% | 19% | 13% | 9% | 81% | 24% |

*Since this question was skipped for some groups in the regional forums and mini forum due to time limitations, the number of respondents from the regional forums was less than 279, and there were no respondents from the mini forum.

Table A4.2 Summary of responses to "Do you think you can contribute to the Government's proposed target of reducing Hong Kong's carbon intensity by 50%-60% in 2020 as compared with the 2005 level? If yes, what measures would you take? If no, why not?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response |
| No. of Respondents | | | 22 | 123 | 1,592 | 237 | 1,288 | 67 | 27 | 1,764 |
| Yes | No. | | 3 | 86 | 1,249 | 215 | 969 | 65 | 4 | 1,342 |
| | % | | 14% | 70% | 79% | 91% | 75% | 97% | 15% | 76% |
| No | No. | | 0 | 2 | 288 | 10 | 278 | 0 | 3 | 293 |
| | % | | 0% | 2% | 18% | 4% | 22% | 0% | 11% | 17% |
| N/A | No. | | 19 | 35 | 55 | 12 | 41 | 2 | 20 | 129 |
| | % | | 86% | 28% | 3% | 5% | 3% | 3% | 74% | 7% |

*Since this question was skipped for some groups in the regional forums and mini forum due to time limitations, there were no respondents from the regional and mini forums.

Table A4.3 Summary of responses to "Are you aware that 4 types of installation (lighting, air conditioning, electrical and lift & escalator) are required by law to meet certain energy efficiency standards?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|-----------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mails, Fax and Emails | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total response no. & percentage |
| No. of Respondents | 177* | | | | | | | | | 177 |
| Yes | No. | | | | | | | | | 24 |
| | % | | | | | | | | | 13% |
| No | No. | | | | | | | | | 44 |
| | % | | | | | | | | | 25% |
| N/A | No. | | | | | | | | | 109 |
| | % | | | | | | | | | 62% |

*Since this question was skipped in some groups in the regional forums due to time limitations, the number of respondents from the regional forums was less than 279.

Table A4.4 Summary of responses to "Do you agree that we should tighten the energy efficiency standards for the four building services installations (lighting, air conditioning, electrical and lift & escalator) covered by the BEC?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response |
| No. of Respondents | 228* | 42 | 22 | 123 | 237 | 237 | | | 27 | 679 |
| Yes | No. | 31 | 4 | 3 | 92 | 201 | 201 | | 1 | 332 |
| | % | 14% | 10% | 14% | 75% | 85% | 85% | | 4% | 49% |
| No | No. | 15 | 1 | 0 | 2 | 10 | 10 | | 0 | 28 |
| | % | 6% | 2% | 0% | 1% | 4% | 4% | | 0% | 4% |
| N/A | No. | 182 | 37 | 19 | 29 | 26 | 26 | | 26 | 319 |
| | % | 80% | 88% | 86% | 24% | 11% | 11% | | 96% | 47% |

*Since this question was skipped for some groups in the regional forums due to time limitations, the number of respondents from the regional forums was less than 279.

Table A4.5 Summary of responses to "Do you think that the BEC should cover other types of building services installations? If yes, what are they?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response |
| No. of Respondents | 193* | 33* | 22 | 123 | 237 | 237 | | | 27 | 635 |
| Yes | No. | 28 | 10 | 5 | 53 | 142 | 142 | | 0 | 238 |
| | % | 15% | 30% | 23% | 43% | 60% | 60% | | 0% | 38% |
| No | No. | 6 | 0 | 0 | 25 | 54 | 54 | | 0 | 85 |
| | % | 3% | 0% | 0% | 20% | 23% | 23% | | 0% | 13% |
| N/A | No. | 159 | 23 | 17 | 45 | 41 | 41 | | 27 | 312 |
| | % | 82% | 70% | 77% | 37% | 17% | 17% | | 100% | 49% |

*Since this question was skipped in some groups in the regional forums and mini forum due to time limitations, the numbers of respondents from the regional forums and mini forum were less than 279 and 42 respectively.

Table A4.6 Summary of responses to "Do you think energy-efficient buildings should be recognised by the government or other institutions through award / labeling scheme?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response |
| No. of Respondents | 262* | 42 | 22 | 123 | 237 | 237 | | | 27 | 713 |
| Yes | No. | 61 | 12 | 3 | 85 | 203 | 203 | | 0 | 364 |
| | % | 23% | 28% | 14% | 69% | 86% | 86% | | 0% | 51% |
| No | No. | 10 | 2 | 0 | 3 | 11 | 11 | | 0 | 26 |
| | % | 4% | 5% | 0% | 2% | 4% | 4% | | 0% | 4% |
| N/A | No. | 191 | 28 | 19 | 35 | 23 | 23 | | 27 | 323 |
| | % | 73% | 67% | 86% | 29% | 10% | 10% | | 100% | 45% |

*Since this question was skipped in some groups in the regional forums due to time limitations, the number of respondents from the regional forums was less than 279.

Table A4.7

Summary of responses to "Will you consider installing energy-efficient electrical appliances even if their price may be higher than the energy-inefficient ones? If yes, why? If no, why not?"

| No. | 1 | 2 | 3 | 4 | 5 | | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|-------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response | |
| No. of Respondents | 231* | 42 | 22 | 123 | 1,592 | 237 | 1,288 | 67 | 27 | 2,037 | |
| Yes | No. | 15 | 7 | 0 | 73 | 1,248 | 184 | 1,011 | 53 | 0 | 1,343 |
| | % | 7% | 17% | 0% | 59% | 79% | 78% | 79% | 79% | 0% | 66% |
| No | No. | 14 | 0 | 0 | 2 | 292 | 25 | 261 | 6 | 0 | 308 |
| | % | 6% | 0% | 0% | 2% | 18% | 10% | 20% | 9% | 0% | 15% |
| N/A | No. | 202 | 35 | 22 | 48 | 52 | 28 | 16 | 8 | 27 | 386 |
| | % | 87% | 83% | 100% | 39% | 3% | 12% | 1% | 12% | 100% | 19% |

*Since this question was skipped in some groups in the regional forums due to time limitations, the number of respondents from the regional forums was less than 279.

Table A4.8

Summary of responses to "Do you agree that we should introduce more electrical appliance under the MEELS?"

| No. | 1 | 2 | 3 | 4 | 5 | | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|-------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response | |
| No. of Respondents | 279 | 37* | 22 | 123 | 1,592 | 237 | 1,288 | 67 | 27 | 2,080 | |
| Yes | No. | 114 | 14 | 3 | 88 | 1,409 | 203 | 1,144 | 62 | 0 | 1,628 |
| | % | 41% | 38% | 14% | 72% | 89% | 86% | 89% | 93% | 0% | 78% |
| No | No. | 14 | 0 | 0 | 3 | 149 | 14 | 133 | 2 | 0 | 166 |
| | % | 5% | 0% | 0% | 2% | 9% | 6% | 10% | 3% | 0% | 8% |
| N/A | No. | 151 | 23 | 19 | 32 | 34 | 20 | 11 | 3 | 27 | 286 |
| | % | 54% | 62% | 86% | 26% | 2% | 8% | 1% | 4% | 100% | 14% |

*Since this question was skipped in some groups in the regional forums and mini forum due to time limitations, the numbers of respondents from the regional forums and mini forum were less than 279 and less than 42 respectively.

Table A4.9

Summary of responses to "Do you think there is a need to tighten up / revisit the grading levels under the MEELS, particularly for room air conditioners and refrigerators which consume a considerable amount of electricity?"

| No. | 1 | 2 | 3 | 4 | 5 | | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|-------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response | |
| No. of Respondents | 279 | 42 | 22 | 123 | 1,592 | 237 | 1,288 | 67 | 27 | 2,085 | |
| Yes | No. | 79 | 8 | 4 | 76 | 496 | 176 | 296 | 24 | 0 | 663 |
| | % | 28% | 19% | 18% | 62% | 31% | 74% | 23% | 36% | 0% | 32% |
| No | No. | 13 | 3 | 1 | 10 | 1,035 | 23 | 978 | 34 | 0 | 1,062 |
| | % | 5% | 7% | 5% | 8% | 65% | 10% | 76% | 51% | 0% | 51% |
| N/A | No. | 187 | 31 | 17 | 37 | 61 | 38 | 14 | 9 | 27 | 360 |
| | % | 67% | 74% | 77% | 30.0% | 4% | 16% | 1% | 13% | 100% | 17% |

Table A4.10 Summary of responses to "Are you using energy-efficient light bulbs at your home or workplace? If yes, what's the result? If no, why not?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|-----|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response | |
| No. of Respondents | 218* | 33* | 22 | 123 | 1,592 | 237 | 1,288 | 67 | 27 | 2,015 | |
| Yes | No. | 42 | 7 | 0 | 68 | 828 | 188 | 577 | 63 | 0 | 945 |
| | % | 19% | 21% | 0% | 55% | 52% | 79% | 45% | 94% | 0% | 47% |
| No | No. | 6 | 2 | 0 | 6 | 157 | 24 | 133 | 0 | 0 | 171 |
| | % | 3% | 6% | 0% | 5% | 10% | 10% | 10% | 0% | 0% | 8% |
| N/A | No. | 170 | 24 | 22 | 49 | 607 | 25 | 578 | 4 | 27 | 899 |
| | % | 78% | 73% | 100% | 40% | 38% | 11% | 45% | 6% | 100% | 45% |

*Since this question was skipped in some groups in the regional forums and mini forum due to time limitations, the numbers of respondents from the regional forums and mini forum were less than 279 and less than 42 respectively.

Table A4.11 Summary of responses to "Do you think we should restrict the supply of energy-inefficient incandescent light bulbs in Hong Kong as in some overseas jurisdictions?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|-------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response | |
| No. of Respondents | 237* | 33* | 22 | 123 | 1,592 | 237 | 1,288 | 67 | 27 | 2,034 | |
| Yes | No. | 31 | 2 | 5 | 83 | 1,000 | 170 | 776 | 54 | 0 | 1,121 |
| | % | 13% | 6% | 23% | 68% | 63% | 72% | 60% | 81% | 0% | 55% |
| No | No. | 24 | 6 | 0 | 8 | 544 | 42 | 492 | 10 | 0 | 582 |
| | % | 10% | 18% | 0% | 6% | 34% | 18% | 38% | 15% | 0% | 29% |
| N/A | No. | 182 | 25 | 17 | 32 | 48 | 25 | 20 | 3 | 27 | 331 |
| | % | 77% | 76% | 77% | 26% | 3% | 10% | 2% | 4% | 100% | 16% |

*Since this question was skipped in some groups in the regional forums and mini forum due to time limitations, the numbers of respondents from the regional forums and mini forum were less than 279 and less than 42 respectively.

Table A4.12 Summary of responses to "Should we consider imposing minimum energy performance standards for electrical appliances? If yes, on what type of electrical appliances?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response |
| No. of Respondents | 217* | 24* | 22 | 123 | 237 | 237 | | | 27 | 650 |
| Yes | No. | 25 | 6 | 1 | 73 | 176 | 176 | | 0 | 281 |
| | % | 11% | 25% | 5% | 59% | 74% | 74% | | 0% | 43% |
| No | No. | 12 | 5 | 1 | 10 | 29 | 29 | | 0 | 57 |
| | % | 6% | 21% | 5% | 8% | 12% | 12% | | 0% | 9% |
| N/A | No. | 180 | 13 | 20 | 40 | 32 | 32 | | 27 | 312 |
| | % | 83% | 54% | 90% | 33% | 14% | 14% | | 100% | 48% |

*Since this question was skipped in some groups in the regional forums and mini forum due to time limitations, the numbers of respondents from the regional forums and mini forum were less than 279 and less than 42 respectively.

Table A4.13 Summary of responses to "Should we phase out energy-inefficient electrical appliances? If yes, what energy-inefficient electrical appliance(s) you think we should phase out?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response |
| No. of Respondents | | | | | 1,355 | | 1,288 | 67 | | 1,355 |
| Yes | No. | | | | 696 | | 644 | 52 | | 696 |
| | % | | | | 51% | | 50% | 78% | | 51% |
| No | No. | | | | 616 | | 610 | 6 | | 616 |
| | % | | | | 46% | | 47% | 9% | | 46% |
| N/A | No. | | | | 43 | | 34 | 9 | | 43 |
| | % | | | | 3% | | 3% | 13% | | 3% |

*Since this question was skipped in some groups in the regional forums and mini forum due to time limitations, there were no respondents from the regional and mini forums.

Table A4.14 Summary of responses to "Do you know your own energy consumption/ carbon emission?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response |
| No. of Respondents | 206* | 22* | | | | | | | | 228 |
| Yes | No. | 18 | 0 | | | | | | | 18 |
| | % | 9% | 0% | | | | | | | 8% |
| No | No. | 34 | 11 | | | | | | | 45 |
| | % | 16% | 50% | | | | | | | 20% |
| N/A | No. | 154 | 11 | | | | | | | 165 |
| | % | 75% | 50% | | | | | | | 72% |

*Since this question was skipped in some groups in the regional forums and mini forum due to time limitations, the numbers of respondents from the regional forums and mini forum were less than 279 and less than 42 respectively.

Table A4.15 Summary of responses to "Do you want to understand more about the carbon emission level in your building and possible ways to reduce energy consumption?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response |
| No. of Respondents | 153* | 25* | 22 | 123 | 237 | 237 | | | 27 | 587 |
| Yes | No. | 71 | 4 | 69 | 194 | 194 | | | 0 | 338 |
| | % | 46% | 16% | 0% | 56% | 82% | 82% | | 0% | 58% |
| No | No. | 3 | 0 | 0 | 14 | 14 | | | 0 | 18 |
| | % | 2% | 0% | 0% | 1% | 6% | 6% | | 0% | 3% |
| N/A | No. | 79 | 21 | 22 | 53 | 29 | | | 27 | 231 |
| | % | 52% | 84% | 100% | 43% | 12% | | | 100% | 39% |

*Since this question was skipped in some groups in the regional forums and mini forum due to time limitations, the numbers of respondents from the regional forums and mini forum were less than 279 and less than 42 respectively.

Table A4.16 Summary of responses to "Has carbon audit been conducted in your own housing estate/workplace?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response |
| No. of Respondents | 254* | 22* | 22 | 123 | 237 | 237 | | | 27 | 685 |
| Yes | No. | 0 | 0 | 11 | 60 | 60 | | | 0 | 93 |
| | % | 9% | 0% | 0% | 9% | 25% | 25% | | 0% | 13% |
| No | No. | 7 | 0 | 61 | 124 | 124 | | | 0 | 197 |
| | % | 2% | 32% | 0% | 50% | 52% | 52% | | 0% | 29% |
| N/A | No. | 15 | 22 | 51 | 53 | 53 | | | 27 | 395 |
| | % | 89% | 68% | 100% | 41% | 23% | 23% | | 100% | 58% |

*Since this question was skipped in some groups in the regional forums and mini forum due to time limitations, the numbers of respondents from the regional forums and mini forum were less than 279 and less than 42 respectively.

Table A4.17 Summary of responses to "Have you ever considered conducting carbon audit in any premises/building? If yes, what were your considerations? If no, why not and what are the obstacles?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response |
| No. of Respondents | 220* | 28* | 22 | 123 | 237 | 237 | | | 27 | 657 |
| Yes | No. | 9 | 0 | 23 | 116 | 116 | | | 0 | 165 |
| | % | 8% | 32% | 0% | 19% | 49% | 49% | | 0% | 25% |
| No | No. | 6 | 0 | 43 | 76 | 76 | | | 0 | 134 |
| | % | 4% | 21% | 0% | 35% | 32% | 32% | | 0% | 20% |
| N/A | No. | 13 | 22 | 57 | 45 | 45 | | | 27 | 358 |
| | % | 88% | 47% | 100% | 46% | 19% | 19% | | 100% | 55% |

*Since this question was skipped in some groups in the regional forums and mini forum due to time limitations, the numbers of respondents from the regional forums and mini forum were less than 279 and less than 42 respectively.

Table A4.18 Summary of responses to "Is energy/carbon audit conducive to identification/implementation of appropriate energy saving measures?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response |
| No. of Respondents | 101* | 20* | 22 | 123 | 237 | 237 | | | 27 | 530 |
| Yes | No. | 8 | 4 | 79 | 179 | 179 | | | 1 | 302 |
| | % | 31% | 40% | 18% | 64% | 76% | 76% | | 4% | 57% |
| No | No. | 0 | 0 | 5 | 12 | 12 | | | 0 | 19 |
| | % | 2% | 0% | 0% | 4% | 5% | 5% | | 0% | 4% |
| N/A | No. | 12 | 18 | 39 | 46 | 46 | | | 26 | 209 |
| | % | 67% | 60% | 82% | 32% | 19% | 19% | | 96% | 39% |

*Since this question was skipped in some groups in the regional forums and mini forum due to time limitations, the numbers of respondents from the regional forums and mini forum were less than 279 and less than 42 respectively.

Table A4.19 Summary of responses to "Do you think that there should be more investment on research & development (R&D) for energy-efficient electrical appliances for local trade use?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|---------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response |
| No. of Respondents | 132* | | 22 | 123 | 237 | 237 | | | 27 | 541 |
| Yes | No. | | 2 | 78 | 162 | 162 | | | 0 | 258 |
| | % | | 9% | 64% | 68% | 68% | | | 0% | 48% |
| No | No. | | 0 | 4 | 14 | 14 | | | 0 | 24 |
| | % | | 0% | 3% | 6% | 6% | | | 0% | 4% |
| N/A | No. | | 20 | 41 | 61 | 61 | | | 27 | 259 |
| | % | | 91% | 33% | 26% | 26% | | | 100% | 48% |

*Since this question was skipped in some groups in the regional forums and mini forum due to time limitations, the number of respondents from the regional forum was less than 279 and there were no respondents from the mini forum.

Table A4.20 Summary of responses to "Do you think the restructuring of electricity tariff can facilitate behaviour change and achieve energy saving?"

| No. | 1 | 2 | 3 | 4 | 5 | | | 6 | | |
|--------------------|-----------------|------------|-------------------------|-----------------------|-------------------------------|--------------------|--------------------------------------|----------------------------------|---------------------------|---------------------------|
| Data Source | Regional Forums | Mini Forum | Other Engagement Events | Mail, Fax and Email** | Views Collection Forms (VCFs) | i. VCFs (Original) | ii. VCFs (Simplified - School Talks) | iii. VCFs (Simplified - Elderly) | Online Forums (SDC & HAB) | Total No. & % of Response |
| No. of Respondents | 178* | | 22 | 123 | 237 | 237 | | | 27 | 587 |
| Yes | No. | | 6 | 80 | 170 | 170 | | | 4 | 283 |
| | % | | 27% | 65% | 72% | 72% | | | 15% | 48% |
| No | No. | | 2 | 11 | 20 | 20 | | | 1 | 39 |
| | % | | 9% | 9% | 8% | 8% | | | 4% | 7% |
| N/A | No. | | 14 | 32 | 47 | 47 | | | 22 | 265 |
| | % | | 64% | 26% | 20% | 20% | | | 81% | 45% |

*Since this question was skipped in some groups in the regional forums and mini forum due to time limitations, the number of respondents from the regional forum was less than 279 and there were no respondents from the mini forum.

Appendix 5 THE NUMBER OF TEXT UNITS FOR EACH ISSUE

The following tables only show the major coded text units for each issue, thus the sum of the number of text units listed for each issue is less than the exact total number of text units shown in the Figures and Tables in Chapter 4.

Table A5.0 The Number of Text Units for “Climate Change and You”

| Perceptions: Impacts on Climate Change | No. of Text Units |
|--|-------------------|
| Global | |
| 1) Changing the Weather Patterns and Temperature | 657 |
| 2) Deteriorating the Ecosystem and Environment | 186 |
| 3) Increasing the Risk of Natural Disasters and Higher Occurrence of Extreme Weather | 121 |
| Personal | |
| 1) Increasing Financial Burdens | 212 |
| 2) Health and Safety | 150 |
| Perceptions: Contributions to Reducing Hong Kong's Carbon Intensity | |
| 1) Reducing Electricity Consumption | 724 |
| 2) Using Public Transportation | 350 |
| 3) Recycling Materials and Planting Trees | 205 |
| 4) Using High Energy-Efficient Appliances | 93 |
| 5) Enriching the Knowledge and Skills of Combating Climate Change | 45 |

Table A5.1 The Number of Text Units for “Tightening of the BEC”

| Perceptions: Reasons for Tightening of the BEC | No. of Text Units |
|---|--------------------------|
| <i>Reasons for Agreement</i> | |
| 1) Help Reduce Energy Consumption and Costs | 83 |
| 2) Existing Standards are Loose | 16 |
| <i>Reasons for Disagreement</i> | |
| 1) Financial Burden | 7 |
| 2) Existing Standards are Sufficient | 4 |
| Perceptions: Reasons for Covering Other Types of Installations | |
| <i>Reasons for Agreement</i> | |
| 1) Help Reduce Energy Consumption and Costs | 4 |
| <i>Reasons for Disagreement</i> | |
| 1) Existing Installations are Sufficient | 11 |
| 2) Already Included the Appliances that Consume High Amounts of Energy | 3 |
| Perceptions: Other Types of Installations to Be Covered in the BEC | |
| <i>Criteria</i> | |
| 1) High Energy Consumption | 12 |
| 2) Most Frequently Used | 2 |
| <i>Examples</i> | |
| 1) Design and Material Use | 28 |
| 2) Outdoor Lighting and Thermal Insulations | 27 |
| 3) Water and Heating Systems | 25 |
| 4) Ventilations | 10 |
| 5) Plumbing and Drainage Systems | 10 |
| Concerns: Tightening Energy Efficiency Standards | |
| 1) Implementation in Old Buildings | 12 |
| 2) Cost Effectiveness | 11 |
| Suggestions: Roles of Stakeholders | |
| The Government | |
| 1) Regulation and Legislation | 38 |
| 2) Review and Research | 23 |
| 3) Incentives and Assistance | 16 |
| 4) Promotion and Education | 13 |

Table A5.2 The Number of Text Units for “Providing Recognition for High Energy-Efficient Buildings”

| Perceptions: Reasons for Providing Recognition of the BEC | No. of Text Units |
|--|--------------------------|
| <i>Reasons for Agreement</i> | |
| 1) Encourage Developers and Increase the Leasing and Resale Values | 93 |
| 2) Increase Transparency of the Standard | 30 |
| 3) Spur More Competition in the Market | 15 |
| 4) Increase Confidence in the Standard | 10 |
| Concerns: Providing Recognition of the BEC | |
| 1) Compatibility with International Standards | 39 |
| 2) Different Building Types with Different Energy Consumption Patterns | 14 |
| 3) Information for Buyers/Renters | 3 |
| Suggestions: Roles of Stakeholders | |
| The Government | |
| 1) Review and Research | 52 |
| 2) Incentives and Assistance | 40 |
| 3) Promotion and Education | 29 |
| Suggestions: Examples of Elements in the Assessment | |
| 1) Estimated/Actual Energy Performance | 102 |
| 2) Structural Design of the Buildings | 33 |
| 3) Innovative Measures | 26 |
| 4) Housekeeping Practices | 25 |
| 5) Renewable Resource Installations | 20 |

Table A5.3 The Number of Text Units for “Exploring the Extension of the MEELS”

| Perceptions: Reasons for Purchasing Appliances under the MEELS | No. of Text Units |
|---|--------------------------|
| Reasons for Agreement | |
| 1) Reduce Energy Consumption and Costs | 224 |
| 2) Protect the Environment and the Next Generation | 140 |
| 3) Energy-Efficient Appliances are More Durable | 11 |
| Reasons for Disagreement | |
| 1) Increase Financial Burden | 33 |
| 2) Increase Waste | 4 |
| Perceptions: Reasons for the Extension of the MEELS | |
| Reasons for Agreement | |
| 1) Provide More Choices and Reduce Prices for Consumers | 56 |
| 2) Increase Awareness of Environmental Protection | 34 |
| 3) Many Electrical Appliances that Consume High Amounts of Energy are not Covered | 19 |
| 4) Incentivise the Supply of Energy-Efficient Electrical Appliances | 17 |
| Reasons for Disagreement | |
| 1) Existing MEELS is not Effective in Saving Energy | 10 |
| Concerns: | |
| 1) Lack of Information | 122 |
| 2) Other Factors Considered (e.g. Function, Style, and Brand) | 41 |
| 3) Increase Financial Burden | 9 |
| 4) Create Further Confusion | 3 |
| Suggestions: The Role of Stakeholders | |
| The Government | |
| 1) Education and Promotion | 38 |
| 2) Legislation and Regulation | 18 |
| 3) Incentives and Assistance | 15 |
| 4) Review and Research | 4 |
| Suggestions: Criteria on Additional Electrical Appliances under the MEELS | |
| 1) High Energy Consumption | 39 |
| 2) Most Frequently Used | 33 |
| Suggestions: Examples of Additional Electrical Appliances under the MEELS | |
| Already Under the MEELS | |
| 1) Air-Conditioners | 126 |
| 2) Refrigerators | 112 |
| 3) Washing Machines | 89 |
| 4) Lighting Appliances | 82 |
| 5) Dehumidifiers | 31 |
| Already Under the VEELS | |
| 1) Televisions | 556 |
| 2) Computers | 537 |
| 3) Water Heaters | 329 |
| 4) Hair Dryers | 126 |

| | |
|--|-----|
| 5) Rice Cookers | 81 |
| 6) Other Office Equipment (e.g. Fax and Copy Machines) | 45 |
| Others (Neither under the MEELS nor the VEELS) | |
| 1) Microwave Ovens and Conventional Ovens | 180 |
| 2) Mobile Phones and Fixed-Line Telephones | 118 |
| 3) Cooking Stoves | 102 |

Table A5.4 The Number of Text Units for “Tightening Up the Energy Efficiency Levels for Room Air-Conditioners and Refrigerators Under the MEELS”

| Perceptions: Reasons for Tightening up Energy-Efficiency for Room Air-Conditioners and Refrigerators Under the MEELS | No. of Text Units |
|---|--------------------------|
| Reasons for Agreement | |
| 1) Keep up with Technological Advances | 59 |
| 2) Enable Consumers to Compare More Choices | 30 |
| 3) Incentivise Manufacturers to Produce More Efficient Electrical Appliances | 18 |
| Reasons for Disagreement | |
| 1) Create Confusion | 41 |
| 2) Increase Financial Burden | 16 |
| 3) Appliances would Become More Efficient through Market Competition | 7 |
| Concerns: | |
| 1) Lack of Public Awareness | 37 |
| 2) Cost-Effectiveness | 8 |
| 3) Effectiveness of the Appliances in terms of Energy Savings | 6 |
| Suggestions: The Role of Stakeholders | |
| The Government | |
| 1) Review and Research | 37 |
| 2) Education and Promotion | 16 |
| 3) Incentives and Assistance | 5 |
| Suggestions: General Suggestions on Tightening up the MEELS | |
| 1) Gradual Tightening | 68 |
| 2) Have More Levels of Energy-Efficiency | 7 |

Table A5.5 The Number of Text Units for “Phasing Out Energy-Inefficient Incandescent Light Bulbs”

| Perceptions: Reasons for Using Energy-Efficient Light Bulbs | No. of Text Units |
|---|--------------------------|
| <i>Reasons for Using</i> | |
| 1) Reduce Energy Consumption and Costs | 290 |
| 2) Longer Lifespan | 73 |
| <i>Reasons for Not Using</i> | |
| 1) Increase Financial Burden | 22 |
| 2) Existing Light Bulbs are still Functioning | 6 |
| Perceptions: Reasons for Phasing Out Energy-Inefficient Light Bulbs | |
| <i>Reasons for Agreement</i> | |
| 1) Longer Lifespan for Energy-Efficient Light Bulbs and Reduce Energy Consumption | 627 |
| 2) Drive More People to Adopt Energy-Efficient Light Bulbs | 73 |
| <i>Reasons for Disagreement</i> | |
| 1) Phase out Automatically through Market Competition | 51 |
| Concerns: | |
| 1) Financial Burden | 64 |
| 2) Structural Limitations of Lighting | 31 |
| 3) Disposal Problem | 27 |
| 4) Limit Market Choices for Consumers | 21 |
| Suggestions: The Role of Stakeholders | |
| The Government | |
| 1) Education and Promotion | 35 |
| 2) Legislation and Regulation | 24 |
| 3) Incentives and Assistance | 19 |
| 4) Review and Research | 5 |
| Suggestions: General Suggestions on Phasing Out Energy-Inefficient Light Bulbs | |
| 1) Gradual Phase Out | 44 |

Table A5.6

The Number of Text Units for “Phasing Out Energy-Inefficient Electrical Installations/Appliances”

| Perceptions: Reasons for Phasing Out Energy-Inefficient Electrical Appliances | No. of Text Units |
|--|--------------------------|
| <i>Reasons for Agreement</i> | |
| 1) Reduce Energy Consumption and Cost | 17 |
| <i>Reasons for Disagreement</i> | |
| 1) Phase out Automatically through Market Competition | 23 |
| 2) Increase Financial Burden | 9 |
| Concerns: | |
| 1) Financial Burden | 7 |
| 2) Limited Market Choices for Consumers | 5 |
| 3) Waste Problem | 4 |
| Suggestions: The Role of Stakeholders | |
| The Government | |
| 1) Review and Research | 13 |
| 2) Legislation and Regulation | 13 |
| 3) Education and Promotion | 5 |
| 4) Incentives and Assistance | 4 |
| Suggestions: Criteria on which Electrical Appliances should have Minimum Energy Performance Standards Imposed | |
| 1) High Energy Consumption | 32 |
| 2) Most Commonly Used | 14 |
| 3) Most Frequently Used | 3 |
| Suggestions: Examples of Electrical Appliances that should have Minimum Energy Performance Standards Imposed | |
| <i>Already Under the MEELS</i> | |
| 1) Air-Conditioners | 219 |
| 2) Lighting Appliances | 198 |
| 3) Refrigerators | 124 |
| 4) Washing Machines | 67 |
| 5) Dehumidifiers | 14 |
| <i>Already Under the VEELS</i> | |
| 1) Televisions | 83 |
| 2) Computers | 76 |
| 3) Water Heaters | 53 |
| 4) Hair Dryers | 20 |
| <i>Others (Neither under the MEELS nor the VEELS)</i> | |
| 1) Cooking Stoves | 27 |
| 2) Fans | 23 |

Table A5.7 The Number of Text Units for “Energy/Carbon Audit”

| Perceptions: Reasons for Conducting/ Considering to Conduct Carbon Audits or Gaining More Information on Own Carbon Emission Levels | No. of Text Units |
|--|--------------------------|
| <i>Reasons for Conducting/Considering</i> | |
| 1) Help Reduce Energy Consumption and Costs | 62 |
| 2) Educate the Next Generation | 5 |
| <i>Reasons for Not Conducting/Not Considering</i> | |
| 1) Time and Cost Consuming | 64 |
| 2) Difficult to get Consensus from the Residents | 11 |
| 3) No Decision Power | 8 |
| Perceptions: Reasons for Perceiving Carbon Audits as an Appropriate Energy Saving Measure | |
| <i>Reasons for Agreement</i> | |
| 1) Effective to Identify Deficiencies and Improvement Opportunities | 22 |
| 2) Deeper Understanding of the Energy Consumption Behaviours | 4 |
| Concerns: Obstacles to Conducting Carbon Audits | |
| 1) Limited Resources | 134 |
| 2) Lack of Understanding | 48 |
| 3) No Concrete Timeframe for Implementation | 7 |
| Suggestions: Roles of Stakeholders | |
| The Government | |
| 1) Promotion and Education | 40 |
| 2) Regulation and Legislation | 27 |
| 3) Incentives and Assistance | 6 |
| 4) Review and Research | 4 |
| Suggestions: Examples of Incentives and Assistance | |
| 1) Financial Incentives and Assistance | 144 |
| 2) Knowledge and Skills | 108 |
| 3) Awards and Certificates | 58 |
| Suggestions: Who takes the lead? | |
| 1) The Government | 207 |
| 2) Listed Companies and Large Corporations | 104 |
| Perceptions: Reasons for the Stakeholders to Take the Lead | |
| 1) Serve as a Role Model to the Public | 18 |
| 2) Fulfill Corporate Social Responsibilities | 14 |
| 3) Sufficient Resources | 6 |

Table A5.8 The Number of Text Units for “Better Understanding of Your Energy Consumption”

| Perceptions: Reasons for Putting More Information on the Electricity Bills | No. of Text Units |
|---|--------------------------|
| <i>Reasons for Putting More Information</i> | |
| 1) Better Understand the Consumption Behaviours and Reduce Energy Consumption | 5 |
| <i>Reasons for Not Putting More Information</i> | |
| 1) Existing Level of Comprehension is Sufficient | 19 |
| Concerns: Obstacles to Obtaining Certain Information | |
| 1) Smart Meter Installation | 116 |
| Suggestions: Examples of Information Types | |
| <i>Criteria</i> | |
| 1) Simple and Easy | 58 |
| <i>Energy and Amount Consumption</i> | |
| 1) Average Consumption Per Capital/Square-Meter/Foot | 403 |
| 2) Benchmarking with Average Household Size | 225 |
| 3) Green Tips and Slogans | 107 |
| 4) Carbon Emission Levels | 86 |
| 5) Rewards/Warning Messages | 41 |
| Suggestions: Examples of Presentation Styles | |
| 1) Graphical | 307 |
| 2) Electronic Billing | 96 |
| 3) Illustrations | 70 |
| 4) Tables | 20 |

Table A5.9 The Number of Text Units for “Using Energy Efficiency Management System (EMS)”

| Perceptions: Reasons for Promoting EMS | No. of Text Units |
|--|--------------------------|
| <i>Reasons for Promoting</i> | |
| 1) Increase Awareness and Understanding on Energy-Saving | 7 |
| 2) Reduce Carbon Emissions | 2 |
| Concerns: Obstacles to Obtaining Information about EMS | |
| 1) Lack of Understanding | 7 |
| 2) Different Building Types with Different Energy Consumption Patterns | 5 |
| 3) Lack of Incentives | 3 |
| Suggestions: Ways to Promote EMS | |
| The Government | |
| 1) Incentives and Assistance | |
| a) Financial Incentives and Assistance | 61 |
| b) Awards and Certificates | 41 |
| c) Support and Training | 20 |
| 2) Promotion and Education | |
| a) Advertising through Billboards and Television Ads | 53 |
| b) Seminars and Workshops | 37 |
| c) Benefits of Adopting EMS | 13 |
| 3) Regulation and Legislation | 38 |
| 4) Review and Research | 31 |

Table A5.10 The Number of Text Units for “Promoting the Adoption of Energy-Efficient Electrical Appliances among the Trades”

| Perceptions: Reasons for More Investment in R&D | No. of Text Units |
|--|--------------------------|
| Reasons for Agreement | |
| 1) More Choices and Lower Cost for Consumers | 30 |
| 2) Reduce Energy Consumption and Protect the Environment | 23 |
| Reasons for Disagreement | |
| 1) Should be Driven by Market Competition | 8 |
| 2) Existing Funding is Sufficient | 5 |
| 3) Do not Understand the Question | 4 |
| Concerns: | |
| 1) Lack of Support and Expertise | 14 |
| 2) Cost Effectiveness | 6 |
| 3) Lack of Promotion and Education | 4 |
| 4) Different Demand of the Sectors | 2 |
| Suggestions: The Role of Stakeholders | |
| The Government | |
| 1) Incentives and Assistance | 20 |
| 2) Education and Promotion | 19 |
| 3) Review and Research | 15 |
| 4) Legislation and Regulation | 4 |
| Suggestions: Ways to Provide R&D Information | |
| 1) Media | |
| a) Television Ads | 55 |
| b) General Mass Media | 32 |
| c) News and Newspapers | 14 |
| d) Radio | 4 |
| 2) Internet | 74 |
| 3) Leaflets and Magazines | 24 |
| 4) Seminars and Workshops | 13 |
| 5) School and Textbook | 12 |

Table A5.11 The Number of Text Units for “Reviewing the Electricity Tariff Structure”

| Perceptions: Reasons for Reviewing the Tariff Structure can Facilitate Behaviour Change | No. of Text Units |
|--|--------------------------|
| <i>Reasons for Agreement</i> | |
| 1) Reduce Energy and Cost Consumption | 34 |
| 2) Increase Awareness of Need to Reduce Energy Consumption | 21 |
| <i>Reasons for Disagreement</i> | |
| 1) Ineffective in Changing Consumption Behaviours | 18 |
| 2) Increase Financial Burden | 17 |
| Perceptions: Reasons for Supporting to Review the Electricity Tariff Structure in General | |
| <i>Reasons for Agreement</i> | |
| 1) Protect the Environment and the Next Generation | 1,196 |
| 2) Reduce Energy Consumption and Costs | 1,051 |
| 3) Fair to All Users | 278 |
| Concerns: | |
| 1) Different Business Consumption Patterns | 21 |
| 2) Feasibility of Implementing Time-of-Use Tariff Structure | 7 |
| Suggestions: The Role of Stakeholders | |
| The Government | |
| 1) Education and Promotion | 26 |
| 2) Incentives and Assistance | 25 |
| 3) Review and Research | 19 |
| 4) Legislation and Regulation | 14 |
| Suggestions: General Suggestions on Tariff Structure | |
| 1) Adopt Progressive Tariff Structure | 1,074* |
| 2) Not to Adopt Regressive Tariff Structure | 939** |
| 3) Unique for All Users | 18 |
| 4) Based on Energy Efficiency and Intensity instead of Energy Consumption | 2 |

*Note: Included the 933 text units from mass identical emails and 71 text units from the street survey.

**Note: Included the 933 text units from mass identical emails.

Table A5. 12 The Number of Text Units for “Other Issues”

| Perceptions: Other Suggestions for Energy Conservation | No. of Text Units |
|--|--------------------------|
| 1) Use of Alternative Energy Resources can Protect the Environment | 7 |
| 2) External Lighting leads to Light Pollution | 6 |
| 3) Education can increase Public Awareness | 6 |
| Concerns: | |
| 1) Bulk Users will Transfer the Operational Cost to Consumers | 7 |
| 2) Cost of Using Alternative Energy Resources is High | 4 |
| 3) Not Enough Awareness and Discussions on External Lighting | 3 |
| 4) Other Factors should be Considered e.g. Ventilation, to Regulate the Air-Conditioning Temperature | 3 |
| Suggestions: | |
| 1) More Education is Needed to Raise Public Awareness | 54 |
| 2) Regulate the Use of External Lighting | 15 |
| 3) Promote the Use of Alternative Energy Resources | 14 |
| 4) Focus to Regulate the Use of Energy by Bulk Users | 13 |
| 5) Regulate the Temperature of Air-Conditioning Units | 11 |

Appendix 6 QUOTES OF VIEWS

Two typical quotes of views for each code have been cited from different sources in the following tables. The language of the original quote has been translated into English when needed.

| Source | | Language of Original Quote |
|-------------------------------|---|----------------------------|
| RF = Regional Forum | Email = Mail, Fax and Email | E = English |
| MF = Mini Forum | OVCF = Views Collection Form (Original) | C = Chinese |
| OEE = Other Engagement Events | SVCF = Views Collection Form (Simplified – School Talk and Elderly) | |
| | Online = Online Discussion Forums | |

Table A6.0 Quotes of Views for “Climate Change and You”

| Perceptions: Impacts on Climate Change | Source | Language of Original Quote | Quotes of Views |
|--|--------|----------------------------|--|
| Global | | | |
| 1) Changing the Weather Patterns and Temperature | Email | E | It means that there is a change in temperature or weather pattern gradually. |
| | OVCF | C | Global warming, such as too hot, reduces the time of the winter in Hong Kong; the weather is getting hotter and hotter. |
| 2) Deteriorating the Ecosystem and Environment | MF | C | Climate change affects the Arctic ecosystem and rising temperatures speeds up the melting of the glaciers. |
| | Online | C | The impact of climate change has become increasingly severe and frequent: extreme weather disasters, food production, global warming, and ecosystem changes have caused great loss of life and property. |
| 3) Increasing the Risk of Natural Disasters and Higher Occurrence of Extreme Weather | RF | C | It caused more severe droughts and floods. |
| | Email | E | Climate change means to me the unreliable weather, unsteady temperature, caused more natural hazards and disaster. |
| Personal | | | |
| 1) Increasing Financial Burdens | RF | C | Climate change increases the room temperatures level and eventually we need to turn on the air conditioners more often than in the past which increases the financial burden. |
| | Email | E | Climate change causes the temperature rises. It makes me use more air-conditioners to cool down myself. |
| 2) Health and Safety | Email | E | Adverse impacts (safety, health, financial, etc.) to our daily life and our ecosystem, and sustainability to their future generations. |
| | OVCF | C | Climate change makes the body vulnerable to fatigue and illness, and even suffering from various types of cancer. |
| Perceptions: Contributions to Reducing Hong Kong's Carbon Intensity | | | |
| 1) Reducing Electricity Consumption | Email | E | We may lower the usage of electricity. We may use fan instead of air conditioners in summer or try to turn off all the lights and electrical appliance when they are not used. |
| | OVCF | C | Can try to save energy at home, and use energy efficiently, such as reducing the electrical standby time and unplug when not in use. |
| 2) Using Public Transportation | Email | E | I think we may reduce the carbon intensity in our daily life. For example, we should use more public transport instead of private cars. This may reduce the air pollutants produced. |
| | Online | C | Each person can change their energy consumption behaviours and reduce their carbon emissions. For example, they can use public transport more instead of driving. |

| | | | |
|---|--------|---|---|
| 3) Recycling Materials and Planting Trees | Email | E | Paper saving (using recycled paper; minimal printing on EF paper, duplex printing, etc.); individual control of air-con in meeting rooms, recycle facilities in office, RO filtered water replaced distilled water. |
| | OVCF | C | Minimise the chance of using unnecessary electricity, planting more plants to produce fresh air. |
| 4) Using High Energy-Efficient Appliances | Email | E | The most important and effective means for individuals to reduce carbon emission will be energy conservation. By reducing the demand for energy, less carbon dioxide will be released during the energy-generation process. For instance, I should always use electrical appliances with the Energy Efficiency Label. |
| | OVCF | C | Using more high energy-efficient appliances to help reduce carbon emission |
| 5) Enriching the Knowledge and Skills of Combating Climate Change | Online | E | All should work together to lessen the negative or adverse impact of climate change on our daily live. Yet, since it's too abstract, we have to make the best way in engaging the public from understanding to behaviour change, so that we all can enjoy the benefit from this regard. |
| | OEE | E | The best way is to educate and inform people, the government takes the ownership and initiatives and allows its people to see the advantages. As the result, people who are practical should be willing to follow the actions. |

Table A6.1 Quotes of Views for "Tightening the BEC"

| Perceptions: Reasons for Tightening of the BEC | Source | Language of Original Quote | Quotes of Views |
|---|--------|----------------------------|---|
| Reasons for Agreement | | | |
| 1) Help Reduce Energy Consumption and Costs | OVCF | E | Tightening the standards helps to reduce energy use and save money, and reduce greenhouse gas emission. |
| | OVCF | C | Tightening the standards helps reduce carbon emissions effectively. |
| 2) Existing Standards are Loose | OVCF | E | People can't identify the real efficiency of installations if all are classified in the first two categories. |
| | OEE | E | The current standard can be easily reached after a few years of implementation, thus to consider the sustainability of the environment, it is a vital action. |
| Reasons for Disagreement | | | |
| 1) Financial Burden | RF | C | The concern is the huge initial cost |
| | RF | E | The cost for changing building's installations is high. |
| 2) Existing Standards are Sufficient | OVCF | E | The current requirements of BEC have been tightened enough for compliance, and the market has just been warming up to observe. |
| | Email | E | The types in the BEC already covered most of the major energy usages in the buildings. |
| Perceptions: Reasons for Covering Other Types of Installations | | | |
| Reasons for Agreement | | | |
| 1) Help Reduce Energy Consumption and Costs | OVCF | E | A higher standard means more energy saving and less carbon emissions. |
| | OVCF | E | Tightening the standards helps to reduce energy use and save money. |
| Reasons for Disagreement | | | |
| 1) Existing Installations are Sufficient | OVCF | E | The current code already covered the major energy consuming areas of a building. |
| | Email | E | The types in the BEC already covered most of the major energy usages in the buildings. |

| | | | |
|--|-------|---|---|
| 2) Already Included the Appliances that Consume High Amounts of Energy | Email | E | The four building services installations now covered by the current BEC already represent the major energy consuming building services installations. The need to extend the requirements to other building services installations may not be imminent. |
| | Email | E | I think those building services are already the most energy-consuming. Straightening these services can already help with the environment a lot. |

Perceptions: Other Types of Installations to Be Covered in the BEC

Criteria

| | | | |
|----------------------------|------|---|---|
| 1) High Energy Consumption | OVCF | E | The systems consume most of the energy used in a building. It is an effective way to save energy by tightening the energy efficiency standards. |
| | OVCF | E | Those building services which consumed significant amount of energy. |
| 2) Most Frequently Used | OVCF | C | The most frequently used |
| | OVCF | E | Most frequently used |

Concerns: Tightening Energy Efficiency Standards

| | | | |
|------------------------------------|----|---|--|
| 1) Implementation in Old Buildings | RF | C | Tightening of the energy efficiency standards really helps old buildings reduce energy consumption. |
| | RF | C | How to deal with the buildings more than 50 years old? |
| 2) Cost Effectiveness | RF | C | Concern on whether the installation is cost-effective, whether we could get from it what we invested, the investment cost would eventually shift to the consumers. |
| | RF | C | No one would object in principle, but we want to know the cost and benefit of the installations. |

Suggestions: Roles of Stakeholders

The Government

| | | | |
|------------------------------|-------|---|---|
| 1) Regulation & Legislation | RF | E | There needs to be some laws and regulations especially for old buildings. |
| | RF | E | Government should set the target like Singapore. In UK, they have Climate Change Act. The law facilitates the implementation and recognition for building. |
| 2) Review and Research | RF | E | Whether we should tighten it, it should be reviewed by professionals such as the technical crews. |
| | OEE | E | BEC should be regularly reviewed and tightened up as appropriate in view of advancement in technology; the current mandatory BEC was not very stringent in some aspects, e.g. the lighting energy code. The Government should conduct regular review, say, once every three years, so that the BEC could be enhanced to keep in pace with technological advancements. |
| 3) Incentives and Assistance | RF | C | The Government should provide more support to improve the technical skills and improve administrative efficiency. |
| | OEE | E | The Government can provide subsidy to support the replacement and installations, thus the general public will have a strong incentive to consider those kinds of appliances or designs. |
| 4) Promotion and Education | RF | C | First to step up in publicity to enhance consumer awareness. |
| | Email | E | Not sure if the public or the building community has already had a good grasp and good knowledge of the Codes. If this engagement is aimed at the larger public, more education would be required to solicit their views. |

Table A6.2

Quotes of Views for “Providing Recognition for High Energy-Efficient Buildings”

| Perceptions: Reasons for Providing Recognition of the BEC | Source | Language of Original Quote | Quotes of Views |
|--|--------|----------------------------|---|
| Reasons for Agreement | | | |
| 1) Encourage Developers and Increase the Leasing and Resale Values | RF | C | The developers can make use of high energy efficient buildings for promotion and driving more attention. |
| | OVCF | E | It provides higher market price for the buildings if they are higher energy efficient buildings. |
| 2) Increase Transparency of the Standard | OVCF | C | The public has greater awareness and increased transparency. |
| | Email | E | This increases transparency of energy efficiency, and thus public monitoring. Premise users/HK residents can choose buildings of higher energy efficiency for work/living. |
| 3) Spur More Competition in the Market | OVCF | C | The developers can compete and encourage each other in developing more energy-efficient buildings. |
| | Email | E | With the labeling, it can show the level of buildings energy efficiency to public that can lead to positive competition between each other to achieve better standard. |
| 4) Increase Confidence in the Standard | OVCF | C | To give the public a clearer understanding on high energy-efficient buildings and facilitate them to make the right choice for the buildings. |
| | OVCF | C | The standards are guaranteed. |
| Concerns: Providing Recognition of the BEC | | | |
| 1) Compatibility with International Standards | OEE | E | The international environmental standards should be taken as reference. And also the Government should consult local green agencies to help provide the recognition. |
| | MF | E | The scheme should follow international standards and being recognised by HK government. Or HK government should ask international organisation to set the standard for the scheme. |
| 2) Different Building Types with Different Energy Consumption Patterns | RF | E | There is difference between commercial buildings and residential buildings. |
| | RF | E | There could be a two way system, push the bottom and pull the top. The new building can get recognition easily, but the existing older buildings will need help. |
| 3) Information for Buyers/Renters | OVCF | E | Citizens should have a right to know how energy efficiency the building when they have to purchase a flat or a product. |
| | OVCF | E | Public should have a deeper and clear understanding about the labeled buildings. |
| Suggestions: Roles of Stakeholders | | | |
| The Government | | | |
| 1) Review and Research | Email | E | There should be a continual effort to review and adjust the scope and the requirements stipulated in the BEC with reference to the public expectation, environmental conditions, market availability of high energy performance building services equipment as well as the efforts and resources that are needed to be devoted for complying with the Code etc. |
| | Email | E | Support regular review of energy efficiency standards in BEC and suggest that the authority shall mandatorily make regular amendment to those standards in order to upkeep the HK standard to the global best practice and in pace with technological advancement. |

| | | | |
|------------------------------|-------|---|---|
| 2) Incentives and Assistance | RF | C | The Government can allow the developers to disclose the information of the energy efficient performance to the public in order to increase their incentives to develop high energy efficient buildings. |
| | Email | E | Various Government departments, i.e. Environmental Protection Department (EPD), Electrical and Mechanical Services Department (EMSD) and others, should coordinate and work together to converge a list of useful options and obstacles, to enable buildings to be more energy efficient, and reduce the barriers of possible increasing costs by administrative means and incentive schemes, e.g. changing the use of space to house additional equipment and enhancing tax reductions for best practice in energy efficiency investments. |
| 3) Promotion and Education | RF | E | If there is not enough education, the scheme will be meaningless, such as ISO scheme. |
| | Email | E | Only the building services professionals have knowledge in this area, probably not the public. If this engagement is aimed at the larger public, more education would be required to solicit their views. |

Table A6.3

Quotes of Views for “Exploring the Extension of the MEELS”

| Perceptions: Reasons for Purchasing Appliances under the MEELS | Source | Language of Original Quote | Quotes of Views |
|---|--------|----------------------------|---|
| Reasons for Agreement | | | |
| 1) Reduce Energy Consumption and Costs | OVCF | E | Long term electrical saving and environmental friendly. |
| | RF | E | If the price different is not too big, I will consider the environmental friendly product because he does not just consider the short term initial costs, but also in the long term it can help saving money. |
| 2) Protect the Environment and the Next Generation | Email | E | It helps to raise the awareness of people in choosing the most suitable electrical appliances, which brings good to our environment. |
| | OVCF | E | For the reason of environmental conservation and gives a role model to our next generation. |
| 3) Energy-Efficient Appliances are More Durable | RF | C | Energy-efficient appliances are durable and environmentally friendly. |
| | OVCF | E | The energy efficient appliances overall have longer operation life, and usually can be paid back by power saving. |
| Reasons for Disagreement | | | |
| 1) Increase Financial Burden | OVCF | C | Grassroots families may not be able to afford expensive electrical appliances. |
| | RF | E | SME needs to use many appliances; it will lead to an increase in their financial burden. |
| 2) Increase Waste | OEE | E | The heavy metal (i.e. mercury) will pollute the environment. |
| | RF | E | Dispose the old appliances will lead to disposal problem, which should be considered by the government. |
| Perceptions: Reasons for the Extension of the MEELS | | | |
| Reasons for Agreement | | | |
| 1) Provide More Choices and Reduce Prices for Consumers | Email | E | Extending the scope enable customers to compare and choose the electrical appliance with lower energy consumption. |
| | OEE | E | Can encourage the manufactures pay great effort on raising the energy efficiency, so that customers can have more choices on energy efficient appliances. |
| 2) Increase Awareness of Environmental Protection | Email | E | It can promote awareness and facilitate consumers in choosing energy-efficient electrical appliances. |
| | Email | E | Yes, since it helps to raise the awareness of people in choosing the most suitable electrical appliances, which brings good to our environment. |
| 3) Many Electrical Appliances that Consume High Amounts of Energy are not Covered | RF | E | Technology is upgrading frequently, so many appliances are not covered at MEELS. |
| | OVCF | E | Communication appliances are not included at MEELS. |
| 4) Incentivise the Supply of Energy-Efficient Electrical Appliances | OEE | E | This act can encourage the manufactures pay great effort on raising the energy efficiency, so that customers can have more choices on energy efficient appliances. |
| | Email | E | To provide incentives for manufacturers to produce appliances of higher grading. |
| Reasons for Disagreement | | | |
| 1) Existing MEELS is not Effective in Saving Energy | RF | C | Depend on how much we can save in electricity consumption; people would question the durability of the energy efficiency. Some examples showed that energy efficiency is decreasing with the product life. |
| | RF | C | The highest level of energy-efficient grading level of the appliances does not equal more durable. |

| Concerns: | | | |
|--|-------|---|---|
| 1) Lack of Information | RF | C | Consumers do not have enough information to select electrical appliances such as they do not know which brand is more durable. |
| | RF | E | Wants to know the durability of the energy-efficient appliances and how much he can save if he uses these appliances. |
| 2) Other Factors Considered (e.g. Function, Style, and Brand) | RF | C | The performance of electrical appliances is also important to take into account in decision making. |
| | RF | E | Energy-efficient is one of the factors, noisy or not should be also considered. |
| 3) Increase Financial Burden | RF | E | General public may afford the increased price, but SME needs to use many appliances, it will lead to an increase in their financial burden. |
| | OVCF | E | Some incorporate owners may still consider using lower costs product to save money in management accent. |
| 4) Create Further Confusion | RF | C | The public cannot even identify between grade 1 and grade 5 at the moment, there is no need to subdivide the levels. |
| | OEE | E | The retail trade and consumers sometimes found the labeling of products confusing. Hong Kong seemed to be adopting a unique labeling system which was different from the format of other economies. |
| Suggestions: The Role of Stakeholders | | | |
| <i>The Government</i> | | | |
| 1) Education and Promotion | OVCF | E | To promote awareness and facilitate consumer in choosing energy efficient, electrical appliances. |
| | OEE | E | They suggested canceling the MEELS and directly stating the energy efficiency on the label. The existing labels are not informative enough, thus more information, i.e. statistics stating how much energy is consume or how efficient the appliances are. |
| 2) Legislation and Regulation | RF | C | Legislation should be imposed on all electrical appliances that they should be under the MEELS. |
| | OEE | E | The labeling scheme should be mandatory. Those who supported expressed HK as one of the international cities should also follow the act which many other foreign developed counties are adopting. |
| 3) Incentives and Assistance | RF | C | There should be tax rebates and other financial incentives to encourage consumers to purchase environmentally friendly appliances. |
| | SVCF | C | Reduce the taxes or surcharges imposed on energy efficient products. |
| 4) Review and Research | Email | E | I think the grading level currently is still ok. But when we see in long run, if the energy consumption still high for refrigerators and air conditioner, a review of the grading should be done in order to reduce or relief the energy consumption problem. |
| | Email | E | There is a need to ensure user friendliness and also review effectiveness of existing standard or grading. |
| Suggestions: Criteria on Additional Electrical Appliances under the MEELS | | | |
| 1) High Energy Consumption | OVCF | E | Those building services which consumed significant amount of energy. |
| | RF | E | For catering, their kitchens require high energy consumption, which should be regulated. |
| 2) Most Frequently Used | RF | C | Electrical appliances that are frequently used |
| | OVCF | C | Should cover the appliances that consume large amounts of electricity or the most commonly used electrical appliances. |

Table A6.4

Quotes of Views for “Tightening Up the Energy Efficiency Levels for Room Air-Conditioners and Refrigerators under the MEELS”

| Perceptions: Reasons for Tightening up Energy-Efficiency for Room Air-Conditioners and Refrigerators under the MEELS | Source | Language of Original Quote | Quotes of Views |
|--|--------|----------------------------|---|
| Reasons for Agreement | | | |
| 1) Keep up with Technological Advances | OVCF | E | Technology advances so it makes sense to tighten and review periodically e.g. every two years so the standard keeps up with time. |
| | Email | E | MEELS standard should be elevated with technology advance, subject to practicality and educating the public for effectiveness. |
| 2) Enable Consumers to Compare More Choices | OVCF | E | Adjusting the grading will provide a more vivid picture in terms of energy efficient equipment for consumers. |
| | Email | E | I agree that we should introduce more electrical appliances under the MEELS as it promotes awareness and facilitate consumers in choosing energy-efficient electrical appliances. |
| 3) Incentivise Manufacturers to Produce More Efficient Electrical Appliances | Email | E | It can incentivise the supply of higher energy-efficient products, encourage R&D of energy-efficient electrical appliances. |
| | OVCF | E | To encourage innovation and new technologies, enhancing the grading levels. |
| Reasons for Disagreement | | | |
| 1) Create Confusion | RF | C | The public is confused about grade 1 and grade 5, there is enough confusion already |
| | SVCF | C | Five grading levels of the labels are already clear enough such that further subdivision may confuse the public. |
| 2) Increase Financial Burden | RF | C | If appliances are included in the mandatory energy label, it will increase the R&D production costs and eventually increase the price of appliances. |
| | Email | E | Increase the financial burden of the people that make them hard to follow the new system. |
| 3) Appliances would Become More Efficient through Market Competition | RF | E | The manufacturers have to keep their competitiveness. The efficiency of the electrical appliances will be advanced after phasing out the low energy efficient ones, so the grading system of MEELS should be tightened gradually. |
| | OVCF | E | Although these may be lesser manufacturers who could produce the compliant product at the initial stage. Later, more manufacturers could produce similar products as they don't want to lose their market shares, the price worth then dropped. |
| Concerns: | | | |
| 1) Lack of Public Awareness | OEE | E | There was a lack of information about the difference between each grade under the MEELS. |
| | RF | E | The users may not understand the energy efficiency label. Generally, consumers know that grade 1 and 2 are the best, but they neglected the quality and other factors. |
| 2) Cost-Effectiveness | RF | C | The energy efficiency labels cannot change the habits of the public. In the end, it still cannot reduce energy consumption. Habits cannot be changed easily. |
| | RF | C | The energy efficiency labeling scheme does not facilitate the public to reduce electricity consumption. |

| | | | |
|---|----|---|--|
| 3) Effectiveness of the Appliances in terms of Energy Savings | RF | C | Besides taking the price under the purchase consideration, the performance of electrical appliances is also important, the first grading level does not necessarily mean it is more durable. |
| | RF | C | The highest level of grading levels of the appliances does not necessarily mean they are more durable. |

Suggestions: The Role of Stakeholders

The Government

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|------------------------------|-------|---|--|
| 1) Review and Research | Email | E | A review on the effectiveness of the current grading levels first before considering tightening the grading levels. |
| | RF | C | The grading levels can be further reviewed and studied, according to the highest utilization rate and the highest consumption rate, disclose the information of the top ten electrical appliances which consume the highest energy. |
| 2) Education and Promotion | OEE | E | The existing labels are not informative enough, thus more information, i.e. statistics figures should be included, like stating how much energy is consume or how efficient the appliances are. |
| | RF | E | Consumers have the right to know how efficient the appliances are and how much energy they consume in that appliance. To conclude, the public are not being educated about the label and how to interpret it, also the electricity cost is cheap therefore they do not care about that. |
| 3) Incentives and Assistance | OEE | E | Financial tools are very important to trigger the behaviour changes, but if the Government gives out “free lunch”, the households may not care much about their energy consumptions. He suggested that the Council can rebate the households if their energy consumption this year is less than last year. |
| | OVCF | E | To give rewards and promote the development of energy efficient electrical appliances. |

Suggestions: General Suggestions on Tightening up the MEELS

| | | | |
|--|------|---|--|
| 1) Gradual Tightening | SVCF | C | This proposed issue cannot be implemented at once; it should be implemented gradually and in steps. |
| | OVCF | C | Gradually adjust the grading levels, first should start with a relatively loose grading level scheme to incentivise the manufacturer to join, but later the grading levels should be tightened more to induce the competition in the market. |
| 2) Have More Levels of Energy-Efficiency | OEE | C | The Energy Efficient Labelling Scheme can be subdivided and provide clearer classifications and better distinguish good appliances. |
| | OEE | E | More levels of energy-efficiency can help to differentiate between high and low efficiency products in a clearer way. |

Table A6.5

Quotes of Views for “Phasing Out Energy-Inefficient incandescent Light Bulbs”

| Perceptions: Reasons for Using Energy-Efficient Light Bulbs | Source | Language of Original Quote | Quotes of Views |
|---|--------|----------------------------|---|
| Reasons for Using | | | |
| 1) Reduce Energy Consumption and Costs | Email | E | It reduces the amount of energy consumed and reduces the amount paid in the bill. |
| | Email | E | Can absolutely pay less as they are of less electricity consumption. Yet, the brightness of the efficient ones and the non-efficient ones are more or less the same. |
| 2) Longer Lifespan | Email | E | The frequency of replacement is a lot less than before; even the cost is higher than old type of light bulbs. |
| | OVCF | E | The result so far is considered satisfactory as their life-cycle cost has been proven to be cheaper than the previous incandescent lamps. |
| Reasons for Not Using | | | |
| 1) Increase Financial Burden | RF | C | The grassroots level is concerned about the price factor. They can give up using incandescent light bulbs only if energy-efficient light bulbs and LED lights become popular and this lowers the price of them. |
| | Email | E | The prices of energy-efficient light bulbs are expensive. |
| 2) Existing Light Bulbs are still Functioning | Email | E | The incandescent light bulbs are still in order and functioning after many years. |
| | MF | E | If we could still use it or it is still functioning, why we need to change it? We should provide subsidy to the elders. |
| Perceptions: Reasons for Phasing Out Energy-Inefficient Light Bulbs | | | |
| Reasons for Agreement | | | |
| 1) Longer Lifespan for Energy-Efficient Light Bulbs and Reduce Energy Consumption | Email | E | Should restrict the supply of energy-inefficient incandescent light bulbs in Hong Kong as in some overseas jurisdictions. Compact fluorescent lamps have a longer life of 8000 hours, compare to the incandescent light bulbs. Using the same amount of electricity, CFLs can provide brighter than the incandescent light. |
| | OEE | E | It can help save energy and reduce carbon dioxide emission. |
| 2) Drive More People to Adopt Energy-Efficient Light Bulbs | MF | C | It should gradually reduce the supply of energy-inefficient light bulbs. When the prices of incandescent light bulbs become more expensive, there will naturally be fewer consumers who choose to buy. |
| | OVCF | E | This encourages the public to switch to consume more energy-efficient appliances. |
| Reasons for Disagreement | | | |
| 1) Phase out Automatically through Market Competition | RF | C | Should be left to the market to decide, as long as the price of CFLs and incandescent light bulbs is more or less the same, the market will slowly phase out incandescent light bulbs. |
| | MF | C | Do not need to restrict its supply as it will automatically phase out anyway. |
| Concerns: | | | |
| 1) Financial Burden | MF | E | The repairing cost of LED light bulb is really costly and it cannot be changed easily by us. |
| | SVCF | C | Restrict the supply of incandescent light bulbs to force people and businesses to purchase more expensive CFLs, inevitably some companies will complain that the restriction will further increase the price and enhance the burden of the public. |

| | | | |
|---------------------------------------|-------|---|--|
| 2) Structural Limitations of Lighting | Email | E | Some users may still be using old lighting fixtures that can only use incandescent light. We should not force people to change the old lighting fixtures if they are still usable. |
| | OVCF | E | However, in theatrical settings it is necessary to have dimmable lighting (without flickering) for houselights and stage lighting. Until dimmable energy-efficient alternatives of sufficient brightness are available, exceptions should be made for incandescent lamps used in specialist lighting. |
| 3) Disposal Problem | OEE | E | One was concerned about the disposal problems of both used incandescent light bulbs and LED light bulbs. A participant raised that despite the LED light bulbs are more energy-efficient than the incandescent light bulbs, there are toxic materials inside. The government should therefore plan and coordinate the recycle programs for both types of light bulbs comprehensively in order to minimise the environmental impacts during the disposal process. |
| | Email | E | I think those incandescent light bulbs are not energy inefficient and cause pollution to the environment. In those light bulbs, heavy metals are used to manufacture such as mercury. This toxic material may kill marine life and cause water pollution. |
| 4) Limit Market Choices for Consumers | Email | E | People have the freedom to choose. |
| | MF | E | Some special functions can be done only by incandescent lights. We need to have exemption for the light bulbs. |

Suggestions: The Role of Stakeholders

The Government

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|-------------------------------|-------|---|---|
| 1) Education and Promotion | SVCF | C | Should step up publicity of the bad side of using incandescent lights, promoting the right attitudes to the public and to abandon these light bulbs. |
| | SVCF | C | Through publicity and education, the public would understand more about reducing their consumption of incandescent light bulbs. |
| 2) Legislation and Regulation | RF | C | Legislation and regulations should be imposed on developers. All new buildings should install energy-efficient light bulbs. |
| | OVCF | E | Regulation on a proper recycle program is essential to minimise the environmental impact due to the mercury content of CFL. |
| 3) Incentives and Assistance | OEE | E | During the implementation stage, the government should consider to provide associated financial subsidies in order to mitigate the fee implication when buying new bulbs for replacement. |
| | OVCF | E | Subsidies can be given to low-income families to support movement. |
| 4) Review and Research | Email | C | There is an urgent need to review and plan for the recycling problem of energy-efficient light bulbs. |
| | RF | C | The Government could set aside money to do some more research and control the building design of the future buildings. |

Suggestions: General Suggestions on Phasing Out Energy-Inefficient Light Bulbs

| | | | |
|----------------------|-------|---|---|
| 1) Gradual Phase Out | Email | E | Given the compatibility concern of the existing lighting fixtures, as well as the initial cost of switching to energy-efficient lighting products, we would recommend the HKSAR Government to mandate the restrictions on the imports and sales of energy-inefficient incandescent light bulbs (ILB) over an appropriate and targeted phase-out period of time. The phase-out period should allow sufficient time to eliminate ILB by market force, so as to encourage the SMEs cease replenishing stocks and supply of ILB within a specified timeframe. |
| | OVCF | C | It could be promoted gradually and in phases, starting with the large chain retail stores first, and then the street stalls in whatever form. |

Table A6.6

Quotes of Views for “Phasing Out Energy-Inefficient Electrical Installations/ Appliances”

| Perceptions: Reasons for Phasing Out Energy-Inefficient Electrical Appliances | Source | Language of Original Quote | Quotes of Views |
|---|--------|----------------------------|---|
| Reasons for Agreement | | | |
| 1) Reduce Energy Consumption and Costs | SVCF | C | Reduce energy consumption and protect the environment. |
| | SVCF | C | Reduce global energy consumption and save money. |
| Reasons for Disagreement | | | |
| 1) Phase out Automatically through Market Competition | OVCF | E | Those electrical appliances with low energy performance will be out-competed in the market. |
| | RF | C | The appliances are divided into five grading levels. The lowest grading level one will naturally be phased out in the market. |
| 2) Increase Financial Burden | RF | C | The increased price will thus enhance low-income families' financial burden. |
| | Email | E | The cost of producing the electrical appliances would boost a lot which finally add financial burden to the consumers. |
| Concerns: | | | |
| 1) Financial Burden | SVCF | C | Poor people cannot afford high energy-efficient appliances. |
| | SVCF | C | Some poor people are unable to purchase high energy-efficient electrical appliances. |
| 2) Limited Market Choices for Consumers | SVCF | C | Everyone has his own preferences, if it is restricted that mean it would also limit people's choice. |
| | RF | E | Different social classes have their own needs. If the choices are limited, the low buying power groups cannot be fit into their level, and they cannot find the cheap products in the market. |
| 3) Waste Problem | OEE | E | With the elimination of low-energy efficiency products, the participants worried if instant replacement is required and that will create waste pollution with the replacement. |
| | SVCF | C | If the supply is restricted quickly, it would waste a large number of appliances and the disposal problem should be considered and addressed. |
| Suggestions: The Role of Stakeholders | | | |
| The Government | | | |
| 1) Review and Research | Email | E | A research should be carried out to identify inefficient installations and appliances with proper benchmarking to global best practice, market dynamics and consumer choices. |
| | RF | E | Most refrigerators on the market is class 1 and rarely sees 2. There should be room for people to get higher level and more research should be done. |
| 2) Legislation and Regulation | RF | C | Minimum standards should be set in the legislation. After reading through the current labels, I am still not sure whether it is good or not. |
| | Email | E | There should be effort to tie in with legislation on producers' responsibility. |
| 3) Education and Promotion | RF | E | It is not really important if there are 5 levels or 10. What is more important is the information and the details behind it. |
| | Email | E | The Government needs more promotion and education on the MEELS to the citizens so that they aware of the energy efficiency of electrical appliances. |
| 4) Incentives and Assistance | RF | C | The Government should subsidise manufacturers to reduce their costs of production. |
| | Email | E | Incentives to switch to alternatives or disincentives to continue use of energy intensive installations/appliances should also be considered. |

| Suggestions: Criteria on which Electrical Appliances should have Minimum Energy Performances Standards Imposed | | | |
|---|-------|---|---|
| 1) High Energy Consumption | OVCF | E | Those with high electricity consumption. |
| | OVCF | E | All of them starting with big consumption of energy. |
| 2) Most Commonly Used | Email | E | It should impose on computer that it is a common electrical appliance in the society that all family must have one. |
| | OVCF | E | Electrical Appliances with most commonly used |
| 3) Most Frequently Used | OVCF | E | Those with most frequently use, like air-con, washing machine. |
| | Email | E | For the electrical appliances which frequently use, like TVs and computers. |

Table A6.7 Quotes of Views for “Energy / Carbon Audit”

| Perceptions: Reasons for Conducting/ Considering to Conduct Carbon Audits or Gaining More Information on Own Carbon Emission Levels | Source | Language of Original Quote | Quotes of Views |
|--|---------------|-----------------------------------|---|
| Reasons for Conducting/Considering | | | |
| 1) Help Reduce Energy Consumption and Costs | RF | C | After conducting the carbon audits, more information on how to save energy should be gathered in order to reduce energy consumption. |
| | Email | E | We can understand how much energy we consume and reflect on own energy consumption. As a result, we can cut the unnecessary energy consumption in a way that much energy can be saved. |
| 2) Educate the Next Generation | RF | C | To raise public awareness in order to better promote the reduction of energy consumption. |
| | Email | E | It is very important to educate the next generation. |
| Reasons for Not Conducting/Not Considering | | | |
| 1) Time and Cost Consuming | OVCF | E | Cost concern, the audits process actually involves huge manpower, and also difficulty on data collection for other indirect GHG emission. |
| | Email | E | I think this is effort consuming and time consuming and it is quite troublesome. And importantly, I don't really know the carbon audits before. |
| 2) Difficult to get Consensus from the Residents | OVCF | E | No consensus among owners. |
| | Email | E | I think it is difficult to measure the carbon footprint of a building as it will involve lots of residents. |
| 3) No Decision Power | Email | C | Not sure whether there is an authority to review and assess the information while there is no relevant knowledge as well. |
| | OVCF | E | I'm not the decision maker. |
| Perceptions: Reasons for Perceiving Carbon Audits as an Appropriate Energy Saving Measure | | | |
| Reasons for Agreement | | | |
| 1) Effective to Identify Deficiencies and Improvement Opportunities | OEE | E | Carbon audits provided a baseline to derive a pragmatic approach to reduce GHG emissions and allowed evaluation of the effectiveness of carbon reduction measures. |
| | Email | E | A carbon audit is important for us to understand and evaluate the carbon footprint. It also tells us the causes of carbon emission so that we know in what area we should improve. |
| 2) Deeper Understanding of the Energy Consumption Behaviours | OEE | E | To facilitate better understanding of this complicated subject and let the stakeholders concerned have a better feel of the potential cost savings and the pay-back period of investment in energy-efficient measures, he suggested that more simple and concrete examples with tangible benefits should be provided in future. |

| | | | |
|--|--------|---|---|
| | Email | E | The management office and properties owners need to know the baseline scenario about how good or how bad they are currently doing in their buildings before they can make improvements. |
| Concerns: Obstacles to Conducting Carbon Audits | | | |
| 1) Limited Resources | OEE | E | It was difficult to persuade companies to conduct carbon audits and switch to more energy-efficient equipment if these initiatives were pursued on a voluntary basis. Citing his experience with the small and medium enterprises (SMEs), these initiatives had to be supported by incentives such as green financing or tax relief if they were to succeed. |
| | Email | E | For those who have not conducted carbon audits in the work place, we face the problem of the lack of clear guideline and professional available, and there is not a very urgent need to pay to do so as well. |
| 2) Lack of Understanding | OEE | E | Do not understand the implementation and current situation of Carbon audits. |
| | Email | E | The public at large might not too understand the carbon audits as compared to energy saving in real dollar terms. The government and large corporations who have the necessary resources and own a considerable scale of building portfolio should take the lead in conducting carbon audits as their corporate social responsibility. |
| 3) No Concrete Timeframe for Implementation | Email | E | We face the problem of the lack of clear timeline and professional available. |
| | RF | C | The Government does not have a timeframe for implementation. |
| Suggestions: Roles of Stakeholders | | | |
| <i>The Government</i> | | | |
| 1) Promotion and Education | Email | E | It would be appropriate for the government (or a quasi-governmental agency) to educate and train property management staff. Presently their role appears mainly as rent collectors and security overseers with little awareness of energy issues. |
| | RF | C | To raise public awareness in order to make it a corporate culture and better promote reducing energy consumption. |
| 2) Regulation & Legislation | Email | E | Set it as a mandatory activity, just like the regular review of fire safety of building. Technologically, electricity companies can help to sponsor the measurement, at least for electricity usage area. |
| | Email | C | The Government should regulate bulk household and commercial users to conduct carbon audits, along with disclosing the energy consumption details and setting their targets of reducing energy consumption. |
| 3) Incentives and Assistance | OEE | E | The Government should provide subsidy or give prizes / recognition to housing with good control of carbon emission and support carbon audits which should be promoted as a tool to calculate and help reduce carbon emission. |
| | Email | E | The Government should provide financial support. For instance, a central funding for organisations to apply to support their energy/carbon audit programs should be set up. The Government (EMSD and EPD) had developed guidance documents and protocols. It will be essential that we now move to the next phase of implementation in a systematic way and financial support and a central fund. |
| 4) Review and Research | OVCF | E | Provide assistance to local R&D to find out the most suitable measures, carbon audit methods and installation technologies for local use. |
| | Online | C | The Government should conduct research with the Universities together and provide technical assistance to the interested parties as well. |

Suggestions: Examples of Incentives and Assistance

| | | | |
|----------------------------|-------|---|---|
| 1) Financial Assistance | OEE | E | SMEs need incentives, e.g. financing and tax reduction. |
| | Email | E | The government may provide an incentive scheme (e.g. rates/rent waiver) and funding/grants for supporting the tenants / owners to facilitate carbon audits. |
| 2) Knowledge and Skills | OVCF | E | Explicit specialist's advice and support from the Government/relevant professional bodies are essential to achieving the primary objective of performing carbon audits. |
| | Email | E | I think capital and skills should be provided by the government or other organisations so that it can facilitate carbon audits. |
| 3) Awards and Certificates | Email | E | The government can make the carbon audits as a competition and give out awards or certificate to the premises or buildings which have reduce the most amount of carbon footprint. |
| | OVCF | E | Encouragement by certifications/ certifications can improve property value. |

Suggestions: Who takes the lead?

| | | | |
|--|-------|---|---|
| 1) The Government | RF | E | The government should take the lead because some coding guidelines are written by them. |
| | Email | E | It is beyond doubt that the government departments should take the leading role and serve as a role model for the rest. |
| 2) Listed Companies and Large Corporations | Email | E | Listed company, big corporation, government department, shopping mall. |
| | OVCF | C | Those listed companies worth more than 1 billion. |

Perceptions: Reasons for the Stakeholders to Take the Lead

| | | | |
|--|-------|---|---|
| 1) Serve as a Role Model to the Public | OEE | E | The government needs to take initiative to make the change and demonstrate to the public. |
| | OVCF | E | As a role model or pioneer, the Government should take the lead to impose carbon audits to all government buildings. |
| 2) Fulfill Corporate Social Responsibilities | OVCF | C | Serve as a role model and fulfill their corporate social responsibility. |
| | Email | E | For the large corporations, this can also be treated as a way to practise their corporate social responsibility. |
| 3) Sufficient Resources | Email | E | Government departments and large corporations should take the lead in conducting carbon audits since they have such money and time on doing this, and we can see the efficiency after conducting this activity, after that, we can consider whether we can follow or not. |
| | OVCF | E | Government departments / large and listed companies, because they have the professional knowledge and capital to do so. |

Table A6.8

Quotes of Views for "Better understanding of Your Energy Consumption"

| Perceptions: Reasons for Putting More Information on the Electricity Bills | Source | Language of Original Quote | Quotes of Views |
|---|--------|----------------------------|---|
| Reasons for Putting More Information | | | |
| 1) Better Understand the Consumption Behaviours and Reduce Energy Consumption | Email | E | A detailed list of each expense should be provided in our electricity bills. It allows the payers the review on their own energy consumption behaviour and makes improvement to reduce the energy used. |
| | Email | E | Analysis on the energy-consumption pattern of the users and the average of all the users so as to let them understand their habits and help them to reduce the usage of electricity in specific aspects. |
| Reasons for Not Putting More Information | | | |
| 1) Existing Level of Comprehension is Sufficient | Email | E | Now is enough. |
| | Email | C | The existing is okay. There is no need to put more information. |
| Concerns: Obstacles to Obtaining Certain Information | | | |
| 1) Smart Meter Installation | RF | C | The electronic billing should be attached with the smart meter and with different interfaces; more data can be shown in a clear and easy-to-understand way. |
| | RF | C | The Government should provide incentives or regulate developing smart meter installation. |
| Suggestions: Examples of Information Types | | | |
| Criteria | | | |
| 1) Simple and Easy | OVCF | E | Simple, just charts and numbers that can show the user and the component of energy consumption. |
| | Email | E | I prefer the bill in table form so that we can read easily and clearly, instead of a clumsy paragraph. |
| Energy and Amount Consumption | | | |
| 1) Average Consumption Per Capital/Square-Meter/Foot | OVCF | E | A reference to average energy consumption square is provided for bench making. |
| | Email | E | The indication of the average electricity consumption such as per-square meter in the energy bills especially for normal residential household will be informative without much administration cost incurred. The average ambient temperature of the reported period will also be a good reference for the air-conditioning energy consumption and should also be included. |
| 2) Benchmarking with Average Household Size | RF | C | Graphical format to show the amount of consumption benchmarking with the same number of household and to indicate how energy consumption is distributed in order to better understand energy consumption patterns and ensure that consumption is below average. |
| | Email | E | Comparison of usage for latest month with same month last year, with norm of similar family size, with same floor size and direction of same building, etc. Equivalent carbon emission is interesting information to provide as well. |
| 3) Green Tips and Slogans | RF | C | Should include some green tips and encouraging words. |
| | Email | E | The slogan that calls people to save more energy, the comparison between this year and the last year of usage electricity should be included. |
| 4) Carbon Emission Levels | RF | C | Can show the average CO2 per capita. |
| | Email | E | Total amount of carbon emission and the expenses needed to pay. |
| 5) Rewards/Warning Messages | RF | C | If energy consumption is lower than the previous statement, the "like" signs can be shown for encouraging the household. |
| | OVCF | E | Quantify those no. into picture, e.g. if the electricity increase the bills give up a "dying tree" in giving warning signal. |

| Suggestions: Examples of Presentation Styles | | | |
|--|-------|---|---|
| 1) Graphical | OVCF | E | To have some sorts of consumption analysis like historic figures and charts. |
| | Email | E | Graphical format and data presented by month and year, by unit of electricity, by carbon emission and by dollar saving are preferable. |
| 2) Electronic Billing | RF | C | Electronic billing can better show energy consumption in detail. |
| | Email | E | I prefer SMS and emails simply we don't need to cut down trees for paper. |
| 3) Illustrations | RF | C | Can use a smiley face to represent the reduction of energy consumption compare to the previous statement, and a sad face represent the same energy consumption? |
| | Email | E | Showing the evidences to me and with some related pictures to present the ideas clearly and not too boringly. |
| 4) Tables | Email | E | I prefer a presentation style of table. A table can show clearly and detail each expense and the dates. |
| | Email | E | I think the data should be presented in table forms so that it can be easily read. |

Table A6.9 Quotes of Views for “Using Energy Efficiency management System (EMS)”

| Perceptions: Reasons for Promoting EMS | Source | Language of Original Quote | Quotes of Views |
|--|--------|----------------------------|--|
| Reasons for Promoting | | | |
| 1) Increase Awareness and Understanding on Energy-Saving | Email | E | Public education is needed to train people with the skills of using the EMS and technologies in buildings and raise their awareness towards the adoption of EMS in buildings. |
| | Email | E | This would involve the elevation of knowledge of system / equipment characteristics of building services installations and opportunities for improvement of energy efficiency by appropriately controlling system / equipment operation to achieve effective demand control and efficient equipment operation. The purpose is to increase awareness of the availability and contribution of the generally low investment tool for improvement of building services installation energy efficiency. |
| 2) Reduce Carbon Emissions | Email | E | A good EMS can help building occupiers to optimise the building systems to improve benefits and reduce carbon emission. |
| | OVCF | E | Although the price is higher, but it can reduce the energy consumption and carbon emissions. |
| Concerns: Obstacles to Obtaining Certain Information about EMS | | | |
| 1) Lack of Understanding | Email | C | The general public lacks understanding of carbon emissions' impact on the environment. |
| | Email | E | We believe the various tools, technologies and specifically the EMS are still not commonly known to the public and perhaps even professionals. More promotions are required of these tools and EMS e.g. through the professional bodies, media, demonstration road shows and technical seminars etc. |
| 2) Different Building Types with Different Energy Consumption Patterns | Email | E | Every building is unique and consultant is required for the feasibility study and recommendation of proper selection. |
| | Email | E | EMSD should evaluate the energy efficiency performance among different common building designs and equipment. |

| | | | |
|-----------------------|-------|---|--|
| 2) Lack of Incentives | Email | C | Generally the public does not have an incentive to reduce their carbon emissions. |
| | OEE | E | The current rental contract for business is rather short, so SMEs do not have high incentives to invest on energy efficient installations or measures. |

Suggestions: Ways to Promote EMS

The Government

1) Incentives and Assistance

| | | | |
|--|-------|---|---|
| a) Financial Incentives and Assistance | OEE | E | The Government to provide subsidy or encouragement schemes for doing BEAM Plus, BEC, smart metering for NGOs. |
| | OVCF | C | To replace the electrical appliances with energy-efficient ones, it usually involves a lot of money. Some corporations might rather give up their energy reduction plans due to this reason. The Government should provide financial subsidies to incentivise them. |
| b) Awards and Certificates | OVCF | E | A system of certification on the energy consumption (or energy efficiency) of the building & the info is easily available to the public. |
| | Email | E | Award schemes, so that those property management companies can have better reputation. |
| c) Support and Training | OVCF | C | Provide subsidies and technical support. |
| | OVCF | C | Provide incentives for promoting the reduction of carbon emissions and provide technical support. |

2) Promotion and Education

| | | | |
|--|-------|---|--|
| a) Advertising through Billboards and Television Ads | Email | E | It may be a good idea to promote the adoption of EMS/tools/technologies in buildings through TV advertising as TV advertisements are more attractive than that hard-copy information, such as leaflets. |
| | Email | E | By using the mass media, such as advertisement in television or newspaper. Leaflet can also be printed out and distribute to the school or public. |
| b) Seminars and Workshops | Email | E | The NGOs or the Government should hold more seminars to give people brief ideas on how our world is going on and the phenomenon we are having now, tell them how to save energy by telling them the improvement after installing EMS and how it helps. |
| | OVCF | E | Seminars to residents, promotion boards for estates to place at prominent place. |
| c) Benefits of Adopting EMS | RF | E | People need to know the benefit, if not, it is hard to implement. Everybody can chip in, maybe in the management fee. |
| | Email | E | The benefit of EMS should be promoted first to improve the knowledge of public on the relationship of it with energy saving. The cost of saving should be illustrated as well. |
| 3) Regulation and Legislation | MF | E | Facilitating behavioural change on a voluntary basis might not be sufficient. Legislation and/or provision of financial incentives such as tax relief for electricity saved and equipment financing should be explored. |
| | RF | C | The Government can mandatorily implement the adoption of EMS, which can facilitate behavioural changes. |
| 4) Review and Research | Email | E | The Government should invest more resources on facilitating research and development on energy efficiency products and provide more assistance for trades to begin using the most energy-efficient appliances. |
| | OVCF | C | Research new technology and projects, encourage and support tertiary education to join work on research together. |

Table A6.10

Quotes of Views for “Promoting the Adoption of Energy-Efficient Electrical Appliances among the Trades”

| Perceptions: Reasons for More Investment in R&D | Source | Language of Original Quote | Quotes of Views |
|--|--------|----------------------------|--|
| Reasons for Agreement | | | |
| 1) More Choices and Lower Cost for Consumers | Email | E | There can be more choices of energy-efficient electrical appliances and create competitive market for energy-efficient electrical appliances at reasonable price. |
| | OVCF | C | Provide the sector more resources for R&D and provide more choices for consumers. Greater varieties of energy efficient electrical appliances are in the market and enhance reductions in costs. |
| 2) Reduce Energy Consumption and Protect the Environment | OVCF | C | Using the energy-efficient electrical appliances can help reduce energy consumption, if there is more R&D on energy-efficient appliances, this can further reduce energy consumption in the future. |
| | Email | E | I believe more investment should be put on research and development as it may suggest more possibility of saving energy and thus save the environment. |
| Reasons for Disagreement | | | |
| 1) Should be Driven by Market Competition | OVCF | E | Companies will go for it automatically when they see potentials. |
| | Email | E | R&D should be market driven instead of being subsidised by the Government. Whenever there is an increasing demand for energy efficient products, R&D will be encouraged because of the lucrative business opportunity. |
| 2) Existing Funding is Sufficient | RF | C | There are not many R&D electrical appliances in the market in Hong Kong; therefore, there is no need to put more into R&D at the moment. |
| | RF | C | There are already some resources for R&D for SME but not very responsive due to the lack of promotion. Therefore, there is no need to further promote R&D in the market. |
| 3) Do not Understand the Question | RF | C | Cannot think of the answer to this question due to lack of understanding on the topic. |
| | RF | C | Cannot provide many opinions on this issue due to the fact that we are not from a professional group. |
| Concerns: | | | |
| 1) Lack of Support and Expertise | OEE | E | Inventing products using less energy for the same efficiency is important. However lack of neither government support nor encouragement. |
| | Email | E | There are very little local researches in this field known. More R&D should be carried out by the universities and commercial sectors partnership in order to enhance the development. |
| 2) Cost Effectiveness | Email | E | The cost effectiveness that determines the direction. If HK has not enough expertise on it, or it is not the whole HK direction to work on technology R&D, simply putting money and effort on R&D of energy-efficient electrical appliances is not effective use of money. |
| | Email | E | Balance should be struck between investment putting into R&D and the cost benefits of the products being commercialised. |
| 3) Lack of Promotion and Education | Email | E | Advertisement is needed in order to let the citizen know more about the scheme before the scheme start. |
| | RF | E | The knowledge of the people is very low, they have contacted a lot of people but they do not know about how much energy they have saved. It should make it popular. The awareness of the people is low which they do not go to reach out for the information. |

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| 4) Different Demand of the Sectors | RF | C | Different businesses would have different concerns due to their business nature. Some catering businesses may require large amounts of energy such as freezing food for a longer period of time. |
| | RF | C | To understand the needs of different businesses first, such as the information on energy-efficient labels and their financial needs. |
| Suggestions: The Role of Stakeholders | | | |
| <i>The Government</i> | | | |
| 1) Incentives and Assistance | OEE | E | Encouraged to provide “green financing” and offer credits to those companies asking for loans for equipment replacement/improvement for environmental improvement purpose. |
| | Email | E | The Government should encourage investments on research and development through various funding schemes. |
| 2) Education and Promotion | RF | E | There is lack of information, it is difficult to find or collect this kind of information. E.g. Website can be more systematic with information in category. |
| | OEE | E | Sufficient information should be provided to the public to convince them of the benefits of energy saving, and a database on performance in carbon auditing should be set up to facilitate the private sector to compare performance among different buildings of similar nature. |
| 3) Review and Research | OEE | E | There is also a need for research on investigating suitable regulations that fit in HK situation, since that in foreign counties might not be applicable to HK, i.e. 25.5 degree |
| | Email | E | HK needs to have a clear understanding of the Best Available Technologies (BAT) to maximise energy efficiency. Ongoing testing and certification of products/appliances with a website detailing the products tested and the performance attained. This should highlight domestic and consumer products. |
| 4) Legislation and Regulation | Email | E | R & D is probably embedded in most appliance manufacturing companies. Hence, I reluctantly support investing and setting up a R&D department. In fact, I see that the verification and validation of the appliance usages can build up consumer confidence for purchasing. |
| | RF | C | The Government should regulate LED quality, since the lower quality of LED lights also consumes a huge amount of energy. |
| | OVCF | C | Most of the electrical appliances are exported to other countries, only regulation is needed in order to better control appliances. |

Table A6.11 Quotes of Views for “Reviewing the Electricity Tariff Structure”

| Perceptions: Reasons for Reviewing the Tariff Structure can Facilitate Behaviour Change | Source | Language of Original Quote | Quotes of Views |
|--|--------|----------------------------|---|
| Reasons for Agreement | | | |
| 1) Reduce Energy and Cost Consumption | SVCF | C | Can reduce electricity consumption and achieve the purpose of reducing carbon emissions. |
| | SVCF | C | Can reduce unnecessary electricity consumption and reduce carbon emissions. |
| 2) Increase Awareness of Need to Reduce Energy Consumption | OVCF | E | People will be more aware of how to use the energy. |
| | Email | E | It is a good way to raise the awareness of people, change their behaviour and reduce energy consumption. |
| Reasons for Disagreement | | | |
| 1) Ineffective in Changing Consumption Behaviours | RF | C | In modern society, consuming electricity is a necessity, so modification of the electricity tariff may not be able to change the habits of electricity consumption. |
| | Email | E | It can be seen from the past experiences that people just can't reduce the use of energy even there are three or more times of tariff increases. |
| 2) Increase Financial Burden | RF | C | Worried about putting more pressure on the lower income families and causing a nuisance. |
| | Email | C | The financial burdens are added to the low capability of the community, causing them more social problems for fear of the heavy financial burden. |
| Perceptions: Reasons for Supporting to Review the Electricity Tariff Structure in General | | | |
| Reasons for Agreement | | | |
| 1) Protect the Environment and the Next Generation | Email | E | When the time past, the citizen may already adapt the green lifestyle and can easily educate the next generation as well in order to reach higher level of energy saving. |
| | Email | E | It is time one started the process of public discussion and rational debates on the relationship between electricity tariff and the environment. |
| 2) Reduce Energy Consumption and Costs | Email | E | I think it may be helpful as it deters any people who abuse the consumption of electricity. With the electricity tariff, people may think twice before they consume electricity and it hence reduces the electricity consumption. |
| | Email | E | It is because the tariff means a greater cost on energy consumption, and with the law of demand in Economics, the increase in price helps to reduce the quantity demanded |
| 3) Fair to All Users | Email | E | For the lower income household and for profit making organisations. This leads to the issue of fairness between the rich and the poor. |
| | Email | C | The commercial sector is consuming more energy, thus there is a need to restructure the tariff structure. It is now unfair to charge the residential sector with progressive tariff structure, but with regressive tariff structure for commercial sector. Therefore, the commercial sector should be charged progressive tariff structure as well. |
| Concerns: | | | |
| 1) Different Business Consumption Patterns | RF | E | How do we define each unit to charge electrical bills? We should also consider the company size. It is difficult to set up a system. |
| | Email | E | This is not fair to those restaurants with high volume of customers and therefore high energy consumption to pay more. Different sectors have different consumption patterns; will not be fair to those who really have to use the huge amount of electricity. |

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|---|------|---|--|
| 2) Feasibility of Implementing Time-of-Use Tariff Structure | OVCF | E | For time-of-use tariff, it would need to define the premises whereby the time-of-use tariff would apply as different areas would have different peak time operations, e.g. residential clubhouse VS office have opposite peak time operations. |
| | RF | E | Some commercial buildings are under the regressive tariff scheme instead of progressive. There should be a comprehensive review and there could be different charge rates at different times as it is very complicated to define time-of-use. |

Suggestions: The Role of Stakeholders

The Government

| | | | |
|-------------------------------|-------|---|---|
| 1) Education and Promotion | RF | C | Enhance publicity to facilitate the behavioural change of the public in terms of energy consumption. |
| | SVCF | C | Through civic education, the public would understand the importance of energy conservation and the conservation of the social environment. |
| 2) Incentives and Assistance | OVCF | E | In order for the market to drive itself, and innovative means could be for the public to earn the reduction of electricity tariff (such as rebate) if certain saving is achieved, the opposite of progressive tariff structure. This could create behaviour change for individuals as well as promoting education by doing in families. |
| | RF | C | Provide incentives such as if there is a reduction in energy consumption as compared to the past, and then there should be some rebates provided. |
| 3) Review and Research | RF | C | Electricity tariff structure should be reviewed and reassessed comprehensively in ten years, a short review every five years as a mid-term review. |
| | RF | E | HK Electric Co. has already adopted this progressive tariff structure. However, it should consider reviewing the "Slope" or the curve. |
| 4) Legislation and Regulation | RF | E | Regulation should be imposed on the tariff structure in order to ensure it is fair to the public. |
| | Email | E | Legislation on the progressive tariff structure for commercial sector instead of the regressive tariff structure. |

Suggestions: General Suggestions on Tariff Structure

| | | | |
|---|-------|---|---|
| 1) Adopt Progressive Tariff Structure | RF | C | Recommend that commercial buildings should adopt the progressive tariff structure. |
| | Email | E | The restructuring of current out-of-date electricity tariff in Hong Kong can definitely facilitate behaviour change and achieve energy saving. The changes should include progressive tariff structure and time-of-tariff programs, adoption of smart grid and smart metering system. |
| 2) Not to Adopt Regressive Tariff Structure | RF | E | Objection on adopting regressive tariff structure as it facilitates people to consume more electricity. |
| | OVCF | C | Against the regressive tariff structure as it is unfair to the family with small population and low energy consumption. |
| 3) Unique for All Users | Email | C | The electricity tariff structure should be the same for both residential and non-residential sectors |
| | RF | C | Suggested the commercial sectors should also adopt the progressive tariff structure. It is not fair to the residential sectors as they adopt the progressive tariff structure now. |
| 4) Based on Energy Efficiency and Intensity instead of Energy Consumption | OVCF | E | For a simple progressive tariff structure consideration should be given to energy-inefficient buildings rather than total amount of electricity consumption of buildings. |
| | Email | C | If the authorities really take into account the progressive tariff structure, it should be adopted with the principle of fairness, i.e. using the total electricity consumption divided by the size of the area such as energy intensity instead of the total amount of consumption. |

Table A6.12 Quotes of Views for “Other Issues”

| Perceptions: Other Suggestions for Energy Conversation | Source | Language of Original Quote | Quotes of Views |
|--|--------|----------------------------|--|
| 1) Use of Alternative Energy Resources can Protect the Environment | Online | E | Gas (e.g. town gas, LPG) is much more efficient fuel as compared with electricity because of higher overall efficiency. |
| | Online | E | Gas cooking is proved far more efficient and cleaner than induction cooking in terms of overall efficiency and carbon emissions. |
| 2) External Lighting leads to Light Pollution | RF | C | Agree that there has been a while already since the lighting pollution problem was first mentioned. |
| | RF | C | The stadium spotlights are a waste of electricity. |
| 3) Education can increase Public Awareness | OVCF | C | Education and publicity are important. Education can be started at an early age; the teacher can teach students to conserve energy for environmental protection, to enhance their awareness of environmental protection. |
| | Email | E | We believe that for a successful promotion campaign, statistical data and analysis should definitely be available to the public for them to understand the severity of the problems and the actual benefits for implementing green measures. |
| Concerns: | | | |
| 1) Bulk Users will Transfer the Operational Cost to Consumers | RF | E | Businesses consume more electricity than household, and eventually they will shift the costs to the consumers. |
| | RF | E | Commercial use for the electricity is the most; they will pass the increased cost on to electricity consumers. |
| 2) Cost of Using Alternative Energy Resources is High | RF | C | Wind and solar power are feasible to use but the problem is that the initial investment is huge. |
| | RF | C | Agree that wind and solar investment is quite large. |
| 3) Not Enough Awareness and Discussions on External Lighting | OEE | E | Lack of discussion regarding light pollution problems in this public engagement exercise. In the circumstance, it was agreed that both domestic and commercial sectors should address this problem in parallel so as to achieve energy saving in the long run. |
| | RF | E | External lighting is a serious problem but not so much has been discussed and done so far. Focus should be on this instead. |
| 4) Other Factors should be Considered e.g. Ventilation, to Regulate the Air-Conditioning Temperature | MF | C | Many people do not really care about the set temperature of air conditioners. However, 25.5-degree is actually not very reasonable, and it does not take into account wind and humidity factors. |
| | Email | C | Various government departments should be making full use of power-saving appliances; air conditioners should always maintain a temperature of 25.5 degrees. |
| Suggestions: | | | |
| 1) More Education is Needed to Raise Public Awareness | OEE | E | Education and promotions should be emphasised to raise the awareness of building professionals and users in handling building renovation and improvement. |
| | RF | E | People only care about the pay back and people are not really concerned about what they are doing. Therefore, enhancing the awareness of the public is very important. |
| 2) Regulate the Use of External Lighting | RF | C | Agreed that the billboard with flash lighting should be included in the scope of control. |
| | Email | E | The administration could review and lay down the best practices of illumination level arrangement so as to provide the optimal lighting standard for public to observe and to avoid excessive electricity used on lighting. |

| | | | |
|---|--------|---|--|
| 3) Promote the Use of Alternative Energy Resources | Online | E | Cleaner and more efficient alternative fuels are available (e.g. town gas, LPG). The council should not restrain its view merely on electricity. |
| | OEE | E | The renewable energy use could be tried in the public housing estate, i.e. solar energy generator, water recycling. |
| 4) Focus to Regulate the Use of Energy by Bulk Users | RF | C | Most energy is consumed by bulk users, but households only contribute 10% of the total energy consumption which causes little effect. |
| | Email | E | The key stakeholders besides households and commercials, I propose the following key stakeholders to be included: 1) NGOs and Churches 2) School 3) Govt. The above stakeholders have important influential power over the general public, yet not all of them are seen green enough. Application of the tariff structure should include them. |
| 5) Regulate the Temperature of Air-Conditioning Units | OEE | E | The government should consider doing legislation, such as regulating the internal temperature to 25.5 Celsius degree in the shopping mall. |
| | Email | C | In fact, the Government suggested public places in Hong Kong should maintain the temperature of air-conditioning at 23.5 degrees. However, it should be changed to 27 or 28 degrees, closer to body temperature. |

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