

For discussion on
28 January 2008

**LEGISLATIVE COUNCIL
PANEL ON ENVIRONMENTAL AFFAIRS**

Government Efforts in Addressing Climate Change

PURPOSE

This paper updates Members on Government efforts and initiatives in addressing climate change.

BACKGROUND

2. On 28 May 2007, having considered the paper presented by the Administration on “Greenhouse Gas Emissions and their Effects on Global Warming” and views of the deputations, the Panel on Environmental Affairs asked the Administration to –

- (a) analyze the deputations’ views and to advise whether and when actions would be taken to address their concern;
- (b) explain the reasons why no emission reduction target had been set for greenhouse gases (GHG);
- (c) explain the set-up of the inter-departmental working group on climate change; and
- (d) set out additional measures which could be taken to reduce GHG emissions.

3. On 2(a) above, a summary of deputations’ views and the Administration’s responses was provided to Members in July 2007 at **Annex A**. This paper deals with the remaining issues.

GREENHOUSE GAS EMISSION REDUCTION TARGETS

4. How to tackle global warming has become a major challenge to the international community. International efforts to tackle climate change have been spearheaded under the 1992 United Nations Framework Convention on Climate Change (UNFCCC). The 1997 Kyoto Protocol to the UNFCCC further assigned mandatory emission targets to Annex I Parties to the UNFCCC (comprising mainly developed countries), such that their combined emissions of six main GHG between 2008-2012 would be reduced by at least 5% below the 1990 levels. For non-Annex I Parties (comprising mainly developing countries including China), this quantitative emission reduction target does not apply. The UNFCCC and its Kyoto Protocol were extended by the Central People's Government to Hong Kong with effect on 5 May 2003. As with other non-Annex I Parties which have ratified the Protocol, China (including Hong Kong) is not required to commit to any limits or reduction of GHG emissions. This differentiated arrangement has been premised on the core principle of "common but differentiated responsibilities" underpinning the UNFCCC¹.

5. Hong Kong is a service economy without any energy intensive industries. We are a relatively small emitter of GHG² and our level of GHG emissions per capita is considerably lower than most of the developed economies³. Our principal source of GHG emissions is power generation, which accounts for over 60% of our total GHG

¹ The principle rests on the recognition that the largest share of historical and current global emissions of GHG has originated from Annex I countries and that per capita emissions in developing countries are still relatively low. Developing countries were not the main contributors to the GHG emissions during the industrialisation period that are believed to be causing today's climate change.

² Hong Kong's GHG emissions totalled about 44.8 million tonnes CO₂-equivalent (CO₂-e) in 2005, accounting for about 0.2% of the global GHG emissions. Hong Kong's carbon intensity, as measured in terms of GHG emissions per unit of GDP, was 27.6 kg per \$HK 1,000 of GDP in 2005 and was one of the lowest amongst developed economies.

³ The level of GHG emissions per capita in Hong Kong has been maintained at around 6.5 tonnes in recent years, which is considerably lower than those recorded in most developed economies such as the United States (about 24 tonnes), Canada (about 24 tonnes), Australia (about 27 tonnes), United Kingdom (about 11 tonnes), European Union (about 9 tonnes), Japan (about 11 tonnes) and Singapore (about 9 tonnes).

emissions⁴. In Hong Kong, over 50% of the electricity is generated from coal burning. At present, there is no mature and commercially viable technology in the world that could reduce, capture and store the GHG discharged from the burning of fossil fuels. Therefore, GHG emissions from power generation can only be substantially reduced by changing the fuel mix, e.g. substantial reduction in coal burning, increase in the use of natural gas or switching to nuclear energy. However, changing the fuel mix for power generation requires careful consideration of a number of important and complicated issues such as stability in power supply and electricity tariff.

6. Taking account of the local situation, we believe the most effective way for Hong Kong to control its GHG emissions in support of the international efforts to combat climate change is to enhance its overall energy efficiency. Alongside some other 20 member economies of the Asia-Pacific Economic Co-operation (APEC), Hong Kong adopted the APEC Leaders' Declaration on Climate Change, Energy Security and Clean Development announced at the APEC Leaders' Meeting held in Sydney in September 2007. The Declaration calls upon APEC economies to achieve a reduction in energy intensity of at least 25% by 2030 (with 2005 as the base year). To underscore our commitment, the Chief Executive has reaffirmed in the 2007 Policy Address that Hong Kong will endeavour to do our best to meet this required reduction in energy intensity. Achieving this goal will avoid emission of approximately 20 million tonnes of GHG every year in 2030.

INTER-DEPARTMENTAL WORKING GROUP ON CLIMATE CHANGE

7. To strengthen co-ordination of efforts in tackling climate change amongst the relevant bureaux and departments, the Administration has established an Inter-departmental Working Group on Climate Change under the lead of Environmental Protection Department. The Inter-departmental Working Group comprises representatives from five bureaux and 16 departments. It is tasked to co-ordinate and promote actions to address climate change and reduce GHG emissions. It will

⁴ The transport sector is the second largest GHG emission source (16.1%), followed by waste (12.1%), other energy sector (7.2%) and industrial processes (2%).

also be responsible for steering a consultancy study on climate change to be commenced shortly (see paragraphs 21 - 22). The terms of reference and membership of the Working Group are set out at **Annex B**.

ADDITIONAL MEASURES TO REDUCE GREENHOUSE GAS EMISSIONS

8. We set out in detail in our submission to this Panel on 28 May 2007 the measures being pursued by the Administration to reduce GHG emissions. A summary of these measures is at **Annex C**. They mainly cover the areas in respect of electricity generation; demand side management; energy efficiency and conservation; building energy efficiency; energy efficiency labelling scheme; renewable energy; land transport; landfill gas utilisation; plantation programme; as well as public awareness promotion and education.

9. We have since then introduced further measures to combat climate change, including those announced in the 2007 Policy Address. These are set out below.

Mandatory Implementation of the Building Energy Codes

10. On 28 December 2007, the Administration launched a three-month public consultation on a proposal to introduce mandatory implementation of the Building Energy Codes (BECs) for certain new and existing buildings, with a view to improving energy efficiency of buildings, alleviating global warming and combating air pollution. It is estimated that for new buildings, implementation of the proposed mandatory scheme will result in energy saving of 2.8 billion kWh in the first decade, which contributes to a reduction in carbon dioxide emissions of 1.96 million tonnes. There would be additional savings arising from improved energy efficiency in existing buildings. Details of the proposal are given in LC Paper No. CB(1) 504/07-08(01) to be discussed by the Panel at the same meeting on 28 January 2008.

Mandatory Energy Efficiency Labelling Scheme

11. Significant energy savings could be achieved by the use of energy-efficient electrical appliances, which help reduce the emission of GHG and other air pollutants. To encourage their wider use, the Administration has launched a Mandatory Energy Efficiency Labelling Scheme (EELS). The Energy Efficiency (Labelling of Products) Bill (the Bill) was introduced into the Legislative Council on 18 April 2007. The initial phase of the mandatory EELS will cover three types of products, namely, room air conditioners, refrigerating appliances and compact fluorescent lamps. The Bills Committee of the Legislative Council is now scrutinizing the Bill. Implementation of the first phase of the mandatory EELS is expected to bring about an annual electricity saving of 150 GWh and a reduction of carbon dioxide emissions of 105,000 tonnes.

12. We will commence implementation of the first phase of the mandatory EELS once the legislative process is completed, and plan for the coverage of the second phase with a view to gradually applying the mandatory requirement to more products.

Environmental Measures under the New Scheme of Control Agreements

13. The new Scheme of Control Agreements (SCAs) signed between the Administration and each of the two power companies in early January 2008 have put in place provisions to encourage the power companies to implement more environmentally friendly measures, which in turn should contribute positively towards the reduction of GHG emissions.

Renewable Energy

14. To encourage more usage of renewable energy (RE), the power companies will enjoy a higher rate of return (11%) for their investment in RE facilities (as compared with 9.99% for other assets). They will also be offered a bonus in the range of 0.01 to 0.05 percentage point in permitted return depending on the extent of RE usage in their electricity generation.

15. Also, grid connection arrangement will be standardised for back up power supply for customers with embedded renewable generation in Hong Kong, subject to technical and reasonable terms. Special cases, such as spill power from embedded renewables and energy-from-waste, will be considered on a case-by-case basis, on reasonable terms. Grid connection/access for RE users/generating facilities using RE will be negotiated between prospective grid users and the respective power company. The Administration will assist where necessary and when requested by either party, including assisting in arriving at mutually agreed access charges.

Energy Efficiency

16. As for energy conservation, we will assess the performance of the power companies based on the number of energy audits they perform for customers and the actual energy saved. A maximum award of 0.02 percentage point in permitted return will be given. Both power companies agreed to set up a loan fund (CLP Power: \$25 million per annum; Hongkong Electric: \$12.5 million per annum) over a five-year period (amounting up to \$125 million and \$62.5 million in total) to provide loans to non-Government customers to implement energy saving initiatives identified in energy audits to promote energy efficiency. They also agreed to set up an education fund (CLP Power: \$5 million per annum; Hongkong Electric: \$2.5 million per annum) for energy efficiency and promotion activities. This fund will be administered by the power companies involving representation from key stakeholders.

Promoting the Use of Biodiesel

17. Biodiesel is a kind of renewable energy. It is estimated that about 128 000 motor vehicles (or 23% of the total number of licensed vehicles) are currently running on fossil diesel in Hong Kong. A wider use of biodiesel in lieu of fossil diesel is therefore conducive to reducing GHG emissions. In order to promote the use of biodiesel (which is more costly itself), the Administration has announced in the 2007 Policy Address that the current duty-free arrangement for use of biodiesel as motor vehicle fuel will become a standing policy.

18. To promote development of the biodiesel market, the Administration will also draw up specifications on the use of biodiesel in motor vehicles. We plan to amend the Air Pollution Control (Motor Vehicle Fuel) Regulation (Cap. 311L) to stipulate the relevant specifications with reference to the EU standards. We will commence consultation with relevant stakeholders shortly, including the major oil companies, biodiesel suppliers, the Motor Traders Association of Hong Kong and transport trades, in preparation for the necessary legislative work. Our intention is to commence implementation of the new regulation in 2009.

Government to Lead by Example

19. The Administration has been taking the lead in energy conservation at its own premises. For example, we have pledged and achieved the target to reduce our power consumption by 6% between 2002/03 and 2006/07 (i.e. 1.5% per year). We have also conducted energy audits and re-audits at over 200 major Government venues.

20. The Administration would continue to lead by example in our emission reduction efforts. We are committed to making the Tamar Development Project one of Government's "greenest" complexes when completed in 2011. Environmentally friendly and energy-efficient features to be incorporated into the project will include double-layer ventilated facades, green roofs, high energy efficiency sea-water cooled chiller plants, rainwater recycling for irrigation purpose, solar electricity panels, service-on-demand escalators, daylight sensor controls and computerized lighting controls. It will also provide a landscaped "green carpet" open space for public enjoyment. As announced in the 2007 Policy Address, we will conduct a carbon audit for the Tamar Complex. We will also encourage private developers to join hands together to conduct carbon audits for their buildings and reduce GHG emissions from these buildings. The Administration is working on the guidelines for carrying out the proposed carbon audits taking account of internationally recognised approaches.

Consultancy Study on Climate Change

21. With the recent release of the findings of major international studies on climate change, particularly those published by the Intergovernmental Panel on Climate Change, there is a need to conduct a comprehensive and up-to-date study to assess the likely impacts of climate change on Hong Kong. The study will, inter alia, –

- (a) review and update the inventories of GHG emissions;
- (b) project the future trends in GHG emissions under different scenarios;
- (c) characterise the impacts of climate change on Hong Kong; and
- (d) recommend additional policies and measures to reduce GHG emissions and facilitate adaptation to climate change and assess their cost-effectiveness.

22. The study will provide a solid scientific basis for the Administration to formulate long-term measures for Hong Kong to mitigate GHG emissions and adapt to climate change. It will also provide useful information for preparing a submission to the Central People's Government for meeting the national communications obligations under the UNFCCC.

Greening Initiatives

23. Despite Hong Kong's small size and dense population, we have designated 23 Country Parks and 17 Special Areas (11 of which are within Country Parks), with a total area of about 41 600 hectares. About 43% of Hong Kong's land area is under statutory protection. These protected areas have not only contributed to the maintenance of a rich biodiversity, but also help enhance the carbon dioxide absorption capacity in Hong Kong. To step up our existing conservation efforts, we have initiated statutory procedures to designate another country park at North Lantau.

24. The Administration also compiles a territory-wide greening programme each year to maximise plantation opportunities. In the past five years, a total of 12 million trees were planted. Another 1.2 million trees will be planted in 2008. We will also push ahead with the greening work in densely populated urban areas through various Greening Master Plans.

25. Apart from planting trees on flat land or slopes, further plantation opportunities are being identified through new techniques. For instance, we aim to implement green roof projects for new Government buildings as far as practicable. About 60 projects with such green features have been completed since 2001. Another 40 additional projects are under construction or planning. These include schools, office buildings, hospitals, community facilities and Government quarters. Green roofs will be retrofitted at 20 existing Government buildings in 2007/08. The Housing Department has also embarked upon pilot schemes to install vertical green panels at lift towers and external walls in public housing estates (e.g. Eastern Harbour Crossing Sites Phases 3 and 4).

26. In addition to actively implementing greening in Government projects, the Administration also seeks to promote this initiative in the private sector. The Buildings Department has commissioned a consultancy study on sustainable building design, which aims to develop relevant guidelines and introduce more green features in buildings.

International Co-operation

27. Climate change is a global challenge that calls for concerted global action. Hong Kong has been working closely with the international community to cope with the impact of climate change and mitigate GHG emissions. Apart from fulfilling our international obligations under the UNFCCC and APEC, the Chief Executive accepted an invitation from Mr Ken Livingstone, Mayor of London, for Hong Kong to join the C40 Large Cities Climate Leadership Group (C40). Formed in 2005, C40 aims to promote collaboration amongst cities in the world to reduce GHG emissions and enhance energy efficiency. London, Tokyo, New York, Sydney, Beijing and Shanghai are amongst the participating cities. The Administration will work closely with the

participating cities to combat climate change.

ADVICE SOUGHT

28. Members are invited to note the contents of this paper for information.

**Environmental Protection Department
January 2008**

Panel on Environmental Affairs

Greenhouse gas emissions and their effects on global warming

Summary of views

Organization	Concern/View	Administration's comments
Dr K S LAM, The Hong Kong Polytechnic University (CB(1)1666/06-07(03))	To meet the target set by the Kyoto Protocol to reduce greenhouse gas (GHG) emissions by at least 5% below 1990 levels, efforts should be made to improve energy efficiency, use cleaner fuels for electricity generation, and reduce vehicular emissions. Some specific measures would include switching from air-cooled to water-cooled air-conditioning systems, use of liquefied natural gas (LNG) to replace coal in electricity generation, planting of trees, collection of methane in landfill sites, and use of environment friendly vehicles.	Many of these measures are being implemented as detailed in our information paper submitted to the Panel. To provide us with a solid scientific basis to develop further our adaptation and mitigation measures, the Administration will commission a new round of study to tap into the findings of all the latest international studies and assess the impacts of climate change on Hong Kong. It will also recommend further adaptation and mitigation measures to address the problem of climate change in Hong Kong.
Civic Exchange (CB(1) 1666/06-07(04))	Not agree that Hong Kong is a small emitter since the lower level of emission is a result of the relocation of most of its polluting industries across the border.	Like all other Parties to the United Nations Framework Convention on Climate Change, we prepare Hong Kong's GHG inventories based on the guidelines developed by the Intergovernmental Panel on Climate Change (IPCC). According to IPCC's guidelines, GHG emissions are assigned to the areas where the GHG are actually emitted into the atmosphere.

Organization	Concern/View	Administration's comments
	<p>Given the lack of an aggressive energy policy on demand side management, a review of the Scheme of Control Agreement for the two local power companies is necessary. There is also a need to introduce a fuel mix on the use of renewable energy (RE), nuclear energy, coal, and LNG for electricity generation.</p> <p>The Administration should adopt mandatory rather than voluntary measures with a view to achieving higher energy efficiency and conservation.</p> <p>The proposed re-organization of Policy Bureaux allowing environment and energy policies to be placed under the same bureau would offer significant opportunities for Hong Kong to consider a policy on climate change.</p>	<p>The Administration has proposed in the Stage II Consultation Paper on the Future Development of the Electricity Market in Hong Kong that financial incentives be provided to the power companies under the post-2008 regulatory regime to further improve their performance in energy efficiency and conservation and to provide additional incentives to power companies to develop RE, including a higher rate of return for RE infrastructure.</p> <p>The Administration is also committed to a wider application of RE in Hong Kong. After considering the social, economic and environmental conditions in Hong Kong, and having regard to the outcome of the public engagement process undertaken by the Council for Sustainable Development, the Administration promulgated the First Sustainable Development Strategy for Hong Kong in May 2005. The Strategy sets a target of having 1-2% of Hong Kong's total electricity supply met by RE by 2012.</p> <p>We will regularly review the best options to enhance energy efficiency.</p> <p>We agree that the more focused structure of the Environment Bureau should help achieve a closer interface between the policies relating to environmental protection, sustainable development and energy.</p>

Organization	Concern/View	Administration's comments
<p>Greenpeace China (CB(1) 1666/06-07(05))</p>	<p>As a cosmopolitan city, Hong Kong has the responsibility to reduce its GHG emissions through measures, such as large-scale development of RE and control of emissions from power plants. As a first step, consideration should be given to the mandatory replacement of tungsten light bulbs with the more energy-efficient compact fluorescent lamps (CFLs), in line with the practice in Holland, Canada and Australia. As the proposal is easy to implement on account of the wide availability of CFLs, it is hoped that the Administration would give full support to the proposal to demonstrate its commitment to energy conservation.</p> <p>It is necessary for Hong Kong to follow other major world cities, such as New York, London and Toronto, to map out its own policy to reduce global warming, including emission targets for GHG and a timetable for achieving the targets.</p>	<p>The Government has been promoting through various channels the benefits of CFLs. We will continue to do so. The EMSD has also covered the CFLs under its voluntary Energy Efficiency Labelling Scheme since 1998. The Energy Efficiency (Labelling of Products) Bill, which provides for a mandatory EELS covering CFLs, was introduced to the Legislative Council for first reading and commencement of second reading debate in April 2007.</p> <p>In Government departments, most of the tungsten lamps have been replaced with CFLs. Further efforts will be made to expedite the replacement of the residual tungsten lamps.</p> <p>As with other developing countries, China (including HKSAR) is not required to set an emission target under the Kyoto Protocol. That said, we are committed to playing our part in support of the international efforts in combating global warming and have put in place a string of measures to reduce GHG emissions as detailed in the information paper submitted to the Panel.</p>
<p>Consumers Acting for People and the Environment (CB(1) 1666/06-07(06))</p>	<p>A recent survey has revealed that the average amount of paper used by each Hong Kong resident per year is six times higher than their counterparts in the world. Amid the global warming crisis, Hong Kong would need to take proactive measures to address the problem, one of which</p>	<p>Reducing paper usage and promoting the use of recycled paper have always been the major focus of the Government's green management. The Environment Protection Department has provided detailed guidelines on reducing paper usage to various bureaux and departments.</p>

Organization	Concern/View	Administration's comments
	<p>would be to economize on the use of paper through the use of electronic means, such as promotion of online payment of bills. It is disappointed that Government departments like the Water Supplies Department has refused to arrange for the use of online payment. There is also a need for legislation to ban junk mails which has given rise to much wastage of papers, as most of these would be disposed of in landfills. The Administration should also take the lead in the use of recycled paper.</p>	<p>The overall paper usage of government offices has reduced by 140,000 reams over the past five years. The use of recycled paper in the same period was increased by 80% from 430,000 to 790,000 reams. These are clear indicators of the progress made in green management.</p> <p>The Treasury has been promoting e-payments through:</p> <ul style="list-style-type: none"> (a) providing e-payment options (including online payment options) for payment of government bills; (b) launching promotional programmes jointly with e-payment service providers; and (c) working with the Office of the Government Chief Information Officer (OGCIO) to develop more customer-oriented e-payment services. The latest initiative is the arrangement for provision of online credit card payment service for non-billed government services. <p>The Treasury will continue to promote e-payments through the above arrangements. E-payments have always been well received by members of the public. As a result of our continued efforts to promote e-payments, currently about 49% of the government bills are settled through e-payments.</p>
<p>Civic Party (CB(1) 1666/06-07(07))</p>	<p>To address the problem of global warming, the Government should -</p> <ul style="list-style-type: none"> (a) set up an inter-departmental working group led by the 	<p>The proposed consultancy study will also look into these suggested measures. An inter-departmental working group on climate change to be led by the Environment Bureau will steer the study and help coordinate efforts from various</p>

Organization	Concern/View	Administration's comments
	<p>Chief Secretary to formulate and implement policies to reduce global warming;</p> <p>(b) work out an adaptation strategy to mitigate consequences associated with global warming;</p> <p>(c) take a partnership approach so that all stakeholders would be invited to exchange views on measures to reduce global warming; and</p> <p>(d) adopt a regional perspective as global warming is a worldwide issue of international concern.</p>	<p>departments to combat climate change.</p> <p>The stakeholders will be consulted on the proposed adaptation and mitigation measures in combating climate change.</p>
<p>Association of Engineering Professionals Society Ltd (CB(1) 1666/06-07(08))</p>	<p>The Government should adopt proactive and effective measures to combat global warming which has not only led to rising sea levels and climate changes but also economic, political and sustainability problems. Apart from waste management and emission control measures, the latter of which would include the use of alternative fuel for electricity generation and the use of more environment friendly vehicles, the Government should also -</p> <p>(a) undertake scientific research on global warming;</p> <p>(b) promote a Clean Development Mechanism amongst corporations with a view to reducing GHG emissions;</p>	<p>As noted above, we will commission a round of consultancy study on climate change. The study will also look into these suggested measures</p> <p>We are mapping out the necessary administrative arrangements in conjunction with the Central People's Government for implementation of Clean Development Mechanism (CDM) projects in Hong Kong. We will announce these arrangements once they are finalized.</p>

Organization	Concern/View	Administration's comments
	<p>(c) develop a low carbon community through environmental practices; and</p> <p>(d) establish a "climate change" environmental and financial investment products centre to encourage investments on environmental industries.</p>	
<p>The Conservancy Association (CB(1) 1666/06-07(09))</p>	<p>The comparatively lower level of GHG emissions in Hong Kong is attributed to the relocation of manufacturing industries to the Pearl River Delta (PRD) Region. To reduce GHG emissions in the PRD Region, the Government should consider -</p> <p>(a) setting GHG emissions reduction target and implementing carbon dioxide emissions trading scheme;</p> <p>(b) introducing proactive compensation schemes, such as tree planting, to offset GHG emissions and environmental degradation associated with large-scale infrastructural projects;</p> <p>(c) minimizing the demand for electricity through enhancing air ventilation and promoting energy efficient practices. Consideration should be given to allowing public officials not to wear jackets and neckties to work during the summer months in an</p>	<p>As with other developing countries, China (including HKSAR) is not required to set an emission target under the Kyoto Protocol. That said, we are committed to playing our part in support of the international efforts in combating global warming and have put in place a string of measures to reduce GHG emissions as detailed in the information paper submitted to the Panel.</p> <p>The proposed consultancy study will also look into these suggested measures, some of which have been implemented in Hong Kong.</p>

Organization	Concern/View	Administration's comments
	<p>attempt to reduce electricity consumption on air-conditioning; and</p> <p>(d) formulating a response strategy to prevent or reduce the degree of adverse effect of climate change.</p>	
<p>Green Sense (CB(1) 1666/06-07(10))</p>	<p>The Government to consider implementing the following measures to reduce global warming -</p> <p>(a) introduction of electricity generation surcharge on power companies and electricity tax on consumers as a means to reduce GHG and electricity consumption;</p> <p>(b) introduction of legislative control on advertisement/signboard lightings which consume a lot of electricity and cause nuisance to the public;</p> <p>(c) mandatory replacement of tungsten light bulbs with the more energy-efficient CFLs; and</p> <p>(d) implementation of greening policy on a broader scale.</p>	<p>The proposed consultancy study will look into these suggested measures.</p> <p>On mandatory replacement of tungsten light bulbs with CFLs, please refer to our response to Greenpeace China above.</p>

Organization	Concern/View	Administration's comments
<p>Friends of the Earth (HK) (CB(1) 1395/06-07(01))</p>	<p>While the prevailing energy policy could ensure a ready and reliable supply of electricity to allow for greater economic development, it fails to take account of environmental concerns. It is hoped that with the proposed reorganization of Government structure to place the environment and energy portfolios under the same Bureau, the energy policy could be rectified such that cleaner fuels would be used for electricity generation, and measures to conserve energy would be put in place.</p> <p>Education on climate change should also be stepped up to apprise the general public the measures to reduce global warming. It is worth noting that apart from rising sea levels and higher temperatures, global warming could also contribute to the higher incurrence of infectious diseases.</p>	<p>The more focused structure of the Environment Bureau should help achieve a closer interface between the policies relating to environmental protection, sustainable development and energy.</p> <p>Noted. We will step up our efforts in promoting the public understanding of the challenges posed by climate change and the measures required to address the problem.</p>

Organization	Concern/View	Administration's comments
	<p>The Government should consider -</p> <ul style="list-style-type: none"> (a) restoring the Co-ordination Group on Global Climate to facilitate the communication and support among Government departments; (b) reduce the use of coal and increase in the use of RE for power generation; (c) promote energy conservation measures and introduction of the mandatory building energy efficiency labeling scheme; and (d) utilize landfill methane. 	<p>An inter-departmental working group on climate change to be led by the Environment Bureau will steer the study and help coordinate efforts from various departments to combat climate change.</p> <p>The proposed consultancy study will also look into these suggested measures, some of which have been implemented in Hong Kong.</p>
<p>The Hong Kong Institution of Engineers (CB(1) 1666/06-07(11))</p>	<p>The Government should consider the following to reduce GHG emissions -</p> <ul style="list-style-type: none"> (a) maximizing the use of RE developed from biofuels, wind and solar energy; (b) promoting LNG in electricity generation and fuel cell in commercial application as these would cut down on carbon dioxide emission and stall the global warming effect; and (c) introducing an Energy Efficient Labelling Scheme and 	<p>The suggestions will be properly evaluated in the consultancy study.</p>

Organization	Concern/View	Administration's comments
	energy tax (or carbon tax) to encourage energy conservation.	
Democratic Party (CB(1) 1666/06-07(12))	Hong Kong's contribution to GHG emissions is not at all small given that it is not an industrialized city. It is disappointing that the Government has been slow in developing environmental measures. Apart from signing the "Clean Air Charter", very little had been done to encourage and assist the factories set up by Hong Kong enterprises in the Mainland to reduce their GHG emissions. While the Mainland is regarded as a developing country under the Kyoto Protocol and is not required to take measures to restrict GHG emissions, Hong Kong, being a developed city, should make attempts to reduce its emissions through the development of RE, use of LNG to replace coal in electricity generation, control of idling vehicles, introduction of energy tax, development of energy conservation measures and provision of green rooftops etc.	<p>We have adopted a string of measures to reduce GHG emissions in support of the international efforts in combating global warming as detailed in the information paper submitted to the Panel. The proposed consultancy study on climate change will look into further adaptation and mitigation measures to combat climate change.</p> <p>We have commissioned the Hong Kong Productivity Council to embark upon a pilot project to provide technical assistance to Hong Kong-invested factories in the Pearl River Delta region in reducing their emissions and enhancing their energy efficiency.</p>
Clear The Air (CB(1) 1666/06-07(13))	Although Hong Kong is not obliged to reduce GHG emissions under the Kyoto Protocol, it should take the lead in reducing its emissions because it is capable of doing so.	Agreed. We have adopted a string of measures to reduce GHG emissions in support of the international efforts in combating global warming as detailed in the information paper submitted to the Panel.

Organization	Concern/View	Administration's comments
	<p>While supporting the installation of flue-gas desulphurization facilities by CLP Holdings Limited and the acceleration of LNG supply, the proposed LNG terminal on the Sokos Island is in many respects non-sustainable and contradicts with the interests of Hong Kong. More efforts should be put on demand side management of electricity generation and a review of the Scheme of Control Agreement is necessary to limit the permitted rate of return of power companies, to prevent them from selling excess electricity to the Mainland and to encourage the implementation of energy saving measures.</p> <p>Supports the use of cleaner fuels in the transport sector, implementation of emissions trading scheme and cooperation within the PRD region in emission reduction</p>	<p>In the 2005/06 Policy Address, the Chief Executive called on the power companies to implement demand side management to promote energy efficiency and conservation. The Administration has proposed in the Stage II Consultation Paper on the Future Development of the Electricity Market in Hong Kong that financial incentives be provided to the power companies under the post-2008 regulatory regime to further improve their performance in energy efficiency and conservation.</p> <p>Noted.</p>
<p>WWF Hong Kong (CB(1) 1726/06-07(01))</p>	<p>GHG emissions are rising in Hong Kong and measures should be taken to reduce emissions. As Hong Kong is at least two years behind the Mainland in using cleaner energy, setting RE targets and promoting energy efficiency measures, there is a need to set up a specifically designated Climate Change Taskforce within the Government to respond to climate change.</p>	<p>An inter-departmental working group on climate change to be led by the Environment Bureau will steer the study and help coordinate efforts from various departments to combat climate change.</p>
<p>Mr WU Chi-man (CB(1) 1666/06-07(14))</p>	<p>The use of electric dryers is not only electricity-consuming but also a source of GHG emissions. To reduce reliance on electric dryers and to avoid blocking air-ventilation for hanging clothes indoors, more outdoor spaces within</p>	<p>Public parks and playgrounds are designed for recreation and leisure uses. Hanging of dry linen and clothes is prohibited under the Pleasure Grounds Regulation of the Public Health and Municipal Services Ordinance (Cap. 132).</p>

Organization	Concern/View	Administration's comments
	<p>residential developments should be provided to enable residents to hang dry their clothing and linens. Consideration should also be given to allowing residents to hang dry their clothing and linens in the open spaces of public parks and playgrounds at certain times of the day. In addition, buildings should be designed in such a way to optimize the use of natural lighting and improve ventilation which would in turn help conserve energy.</p>	<p>In the Joint Practice Note No. 2 issued by the Buildings Department, Lands Department and Planning Department in February 2002, utility platform is one of the green features which may be exempted from gross floor area calculations subject to a maximum area of 1.5 sq.m. per residential unit. Government's records show that utility platform is one of the more commonly adopted green features in recent building projects.</p>
<p>CLP Holdings Ltd (CB(1) 1726/06-07(02))</p>	<p>Hong Kong has the potential to stabilize or reduce GHG emissions over the next 10 to 20 years through the following four key approaches -</p> <ul style="list-style-type: none"> (a) improved energy efficiency and conservation, particularly in buildings; (b) use of alternate hybrid and electric vehicles, traffic management measures and public transportation; (c) greater reliance on LNG and nuclear power; and (d) development of RE. <p>Implementing these approaches would require a clear and integrated energy policy that guides the resource mix in order to achieve an excellent balance among reliability, affordability, energy security and environment.</p>	<p>These suggestions will be properly evaluated in the consultancy study.</p>

Organization	Concern/View	Administration's comments
Democratic Alliance for Betterment and Progress of Hong Kong (DAB) (CB(1) 1764/06-07(01))	The Government should consider the following measures to reduce GHG emissions - (a) introduction of GHG emission reduction targets; (b) emission control on power generation through emissions trading, changes in fuel mix, demand side management and electricity tax; (c) energy conservation through the introduction of energy efficiency measures; (d) development of RE; (e) greening; and (f) use of methane from landfills.	Ditto.

Inter-departmental Working Group on Climate Change

Terms of Reference

Having regard to the obligations of the Hong Kong Special Administrative Region (HKSAR) under the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol, the Terms of Reference of the Inter-departmental Working Group on Climate Change are –

- (i) to co-ordinate, in close consultation with Government bureaux and departments and other bodies concerned, existing and planned activities to fulfill the HKSAR's obligations under UNFCCC;
- (ii) to monitor and co-ordinate efforts of relevant Government bureaux and departments in formulating and carrying out measures to control greenhouse gas emissions and facilitate adequate adaptation to climate change;
- (iii) to monitor closely the latest international developments on climate change and make recommendations for appropriate action taking account of these developments; and
- (iv) to formulate and co-ordinate action to promote public awareness and understanding of climate change and its likely effects.

Chairman

Deputy Director (Environment)3, EPD

Membership

Representatives at directorate level from:

Environment Bureau (Energy Division)

Development Bureau (Works Branch)

Transport and Housing Bureau (Transport Branch)

Food and Health Bureau

Education Bureau

Economic Analysis and Business Facilitation Unit, Financial Secretary's Office

Environmental Protection Department

Hong Kong Observatory

Electrical and Mechanical Services Department

Housing Department

Planning Department

Agriculture, Fisheries and Conservation Department

Architectural Services Department

Buildings Department

Civil Engineering and Development Department

Drainage Services Department

Food and Environmental Hygiene Department

Health Department

Home Affairs Department

Leisure and Cultural Services Department

Transport Department

Water Supplies Department

Summary of existing GHG reduction measures in Hong Kong

Categories	Control Measures
Electricity Generation	To allow only the construction of gas-fired power generating units since 1997.
	To encourage power companies to maximize the use of natural gas for power generation.
	To utilize landfill gas as fuel, including its use in production of town gas.
Demand Side Management	To encourage power companies to implement demand side management to promote energy efficiency and conservation.
Energy Efficiency and Conservation	To implement the voluntary Energy Efficiency Labelling Scheme for household and office appliances and equipment, as well as for vehicles since 1995.
	To actively promote the use of water-cooled air-conditioning systems. A Code of Practice for Water-cooled Air Conditioning System was published in July 2006, covering guidelines for cooling tower design, installation, testing, commissioning, operation and maintenance.
	To implement energy saving programmes in Government. The Government has pledged and achieved the target to reduce its energy consumption by 6% between FY 2003-04 to FY2006-07. Energy audits and re-audits are carried out at Government venues.
	To maintain air-conditioned room temperature of government offices at 25.5°C in summer months.
	To encourage the public and business sector to save energy, through, for example, minimise the use of air-conditioners, set air-conditioned room temperature at 25.5°C and maintain air-conditioners in good working condition to reduce power consumption.
	To support the Clean Air Charter initiative led by the business sector.
Building Energy Efficiency	To implement the voluntary Energy Efficiency Registration Scheme for Buildings introduced since 1998 to promote the application of the Building Energy Codes covering lighting, air conditioning, electrical and lift & escalator installations.
	To require all new Government buildings and retrofit projects to fully comply with the Building Energy Codes.

Categories	Control Measures
	To require all works departments to apply energy efficient features (including green roofing) in new Government buildings and retrofit projects where feasible. Guidelines are provided to bureaux and departments in adopting energy efficient measures in their operations.
Renewable Energy	To have 1-2% of the local power needs to be met by renewable energies by 2012.
	To actively promote wider application of renewable energy by collaborating with the two power companies and providing necessary incentives.
	To continue the on-going efforts to promote the use of renewable energy in public works projects. A number of pilot projects have been implemented.
Land Transport	To continue to extend the coverage of the public transport system, in particular the railway network.
	To promote use of cleaner vehicles under the “Tax Incentives Scheme for Environment-friendly Petrol Private Cars”, i.e. reducing the First Registration Tax by 30%, subject to a cap of HK\$50,000 per car.
	To encourage early replacement of diesel taxis and light buses with liquefied petroleum gas (LPG) ones by providing financial incentives.
Landfill Gas Utilization	To maximise utilisation of landfill gas from all 3 operating and 13 closed restored landfills as fuel substitutes.
Tree Plantation	To carry out tree plantation programmes.
Research and Studies	To continue and support scientific research related to climate change.
Public Awareness and Education	To raise public awareness and enhance the community’s understanding of climate change and the important role that individuals could play in tackling the problem through lifestyle and behavioural changes, notably in respect of energy conservation. e.g. through organizing “I love Hong Kong I love Green” campaign, “Hong Kong Energy Efficiency Award”, production and distribution of an educational package on climate change to schools; and organizing thematic talks and seminars, etc.