

**Bills Committee on  
Air Pollution Control (Amendment) Bill 2008**

**List of Follow-up Actions Arising from  
the Discussion at the Meeting on 22 April 2008**

**Administration's Response**

- I. To advise the basis upon which the required reduction of 25% in energy intensity by 2030 (with 2005 as the base year) under the Asia-Pacific Economic Co-operation (“APEC”) Leaders’ Declaration on Climate Change, Energy Security and Clean Development (“the Declaration”) is arrived at. To also advise the 2005 base figure for Hong Kong and whether the Administration will set milestones for assessing the effectiveness of the measures to be taken to achieve the required reduction at a regular interval.**
1. At the APEC Leaders’ Meeting held in Sydney in September 2007, Hong Kong adopted the Declaration together with some other 20 economies of APEC. The Declaration calls upon the APEC economies to achieve a reduction in energy intensity of at least 25% by 2030 (with 2005 as the base year). The aspirational goal was considered by the APEC economies to be achievable and had taken into account the current energy performance and expert’s assessment on the projected increases in population and economic growth in the APEC region, with the assumptions of a continued introduction of comprehensive policies to promote energy efficiency, a comparable rate of uptake of technological advances and best practices to current levels.
  2. The energy intensity of Hong Kong in 2005 was 457 terajoule per billion Hong Kong dollars. To underscore our commitment, Hong Kong will endeavour to do our best to meet this required reduction in energy intensity. We will periodically review the energy intensity level of Hong Kong and implement measures at all levels to promote energy efficiency. It is estimated that achieving this goal will avoid emission of approximately 20 million tonnes of greenhouse gas (“GHG”) every year in 2030. The Environmental Protection Department has commissioned a “Study of Climate Change in Hong Kong” in March 2008. Amongst other things, the study will recommend additional strategies and measures to further control GHG emissions and adapt to climate change, as well as the cost effectiveness of those measures.

**II. To provide an information paper on Building Energy Codes (“BEC”) and how the proposed mandatory implementation of BEC can help reduce power consumption, thereby improving air quality and alleviating global warming. To also advise whether BEC will apply to designs of buildings and if so, consideration should be given to encouraging designs which allow for better ventilation such that air-conditioning is required only when necessary.**

1. Buildings account for 89% of the electricity consumption in Hong Kong in 2005. It is evident that energy efficiency in buildings is an area where significant energy savings and greenhouse gas emission reduction can be made. The Government briefed the Legislative Council Panel on Environmental Affairs (“the EA Panel”) in January 2008 on the public consultation on a proposed mandatory implementation of BEC (Paper CB(1)504/07-08(01)). It is estimated that for new buildings, the mandatory implementation of BEC will result in energy saving of 2.8 billion kWh in the first decade, which contributes to a reduction in carbon dioxide emission of 1.96 million tonnes. Additional energy savings could be achieved by improving the energy efficiency of existing buildings. The public consultation completed on 31 March 2008 and we will report to the EA Panel in May 2008 on the outcome of the public consultation exercise.
2. BEC aims at setting minimum energy efficiency standards on four key types of building services installations, namely lighting, air-conditioning, electrical, lift and escalator installations. The above-mentioned building services installations consume up to 80% of the total electricity consumption of a typical office building. The Code of Practice for Energy Efficiency of Air Conditioning Installations issued by the Electrical and Mechanical Services Department (“EMSD”) has stipulated requirements on the design and selection of air conditioning installations. Owing to design consideration and site constraints, the Government does not require a compulsory adoption of a natural ventilation design. Despite that, EMSD has been publishing guidelines to encourage the adoption of sustainable sources of energy in the design of buildings, having considered the particular site conditions. Examples of sustainable sources of energy include the use of daylight, renewable energy and natural ventilation.

**III. To confirm whether emission allowances for power plants will be provided free of charge and if so, the rationale for such an arrangement.**

1. The amount of emission allowances to be allocated to the power plants essentially reflects the emission caps imposed on them. They serve as a useful tool to facilitate assessment of whether the power plants comply with the emissions caps and participation in emissions trading. They will be allocated to the power plants without charge. This is in line with the international practices adopted in advanced countries, such as the United Kingdom and Ontario, Canada, where all emission allowances are allocated free of charge under the National Emission Reduction Plan and the Ontario Emissions Trading Regulation 397/01 respectively. In the United States, the vast majority of emission allowances are allocated free of charge although a small quantity (e.g. about 2.8% for the Sulphur Dioxide Trading Program under the United States Acid Rain Program) may be reserved for allocation by auction to facilitate new entrants to have a public source of emission allowances.
2. Charging the emission allowances upon allocation is also considered not appropriate because the cost will inevitably be passed through to the consumers. This may unnecessarily increase the financial burden of the public.

**Environment Bureau/Environmental Protection Department  
May 2008**