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Bills Committee on Buildings Energy Efficiency Bill

Background brief prepared for the meeting on 8 January 2010

Purpose

This paper gives a summary of discussion by the Panel on Environmental Affairs on the proposed mandatory implementation of the Building Energy Codes (BEC).

Introduction

2. As Hong Kong is a commercial city with limited industrial operations, it has greater potential to improve energy efficiency and reduce greenhouse gas emissions by promoting energy efficiency in buildings.

3. Since 1998, the Electrical and Mechanical Services Department (EMSD) has issued five sets of BEC, covering lighting, air-conditioning, electrical as well as lift and escalator installations, which stipulate the minimum energy performance standards of these installations. It has also launched the voluntary Hong Kong Energy Efficiency Registration Scheme for Buildings with the aim to promote the application of BEC. A registration certificate will be issued to a building that successfully meets the individual BEC standards. Up to September 2009, 2 515 registration certificates have been issued to 1 061 building venues involving 2 682 installations. Of the 1061 building venues, 72% are government premises.

4. As voluntary compliance with BEC does not appear to be forthcoming, the Administration has launched a three-month public consultation on a proposal to introduce mandatory implementation of BEC for certain new and existing buildings. Under the proposal, new commercial buildings and the communal areas of new residential and industrial buildings in both the private and public sectors as well as major retrofitting works in existing buildings should comply with BEC, energy audits will be required for certain buildings once every 10 years, and buildings which have exceeded the minimum building energy efficiency standards by a prescribed percentage will be recognized by an energy mark through a voluntary administrative

scheme. It is estimated that for new buildings, the implementation of the proposal will result in energy savings of 2.8 billion kilowatt hours and reduction of 1.96 million tonnes of carbon dioxide emissions. An additional capital outlay in the region of 3% to 5% of the building construction cost may have to be incurred in return for about 10% to 15% annual saving in energy bills. On average, the payback period for the additional investment is six years.

5. The public consultation which ended in March 2008 concludes that the mandatory implementation of BEC is in the right direction for promoting energy efficiency and conservation in buildings.

The Bill

6. The Bill seeks to require compliance with codes of practice promulgated by EMSD concerning the energy efficiency of four types of building service installations, including air-conditioning, electrical, lift and escalator as well as lighting installations, and energy audits in respect of certain types of buildings.

Major concerns raised by the Panel

7. The legislative framework of mandatory implementation of BECs was discussed by the Panel at its meeting on 15 July 2009.

8. While supporting the need to promote energy efficiency and conservation in buildings, some members expressed concern that the proposed mandatory implementation of BECs would become an additional burden on owners of pre-enactment buildings, particularly those smaller developments and those without Incorporated Owners, who would have much difficulty in funding the energy audits and maintenance of energy-efficient installations. They considered that the Administration should provide the necessary assistance to building owners to alleviate their hardship and facilitate compliance with the scheme. Consideration should also be given to spelling out clearly the qualifications of competent persons to carry out energy audits.

Relevant papers

Consultation document provided by the Administration for the Panel meeting on 28 January 2008 http://www.legco.gov.hk/yr07-08/english/panels/ea/papers/ea0128cb1-504-1-e.pdf

<u>Minutes of the Panel meeting on 28 January 2008</u> http://www.legco.gov.hk/yr07-08/english/panels/ea/minutes/ea080128.pdf Information paper provided by the Administration for the Panel meeting on 26 May 2008

http://www.legco.gov.hk/yr07-08/english/panels/ea/papers/ea0526cb1-1595-4-e.pdf

Follow-up paper provided by the Administration for the Panel meeting on 26 May 2008

http://www.legco.gov.hk/yr07-08/english/panels/ea/papers/ea0526cb1-2316-1-e.pdf

<u>Minutes of the Panel meeting on 26 May 2008</u> http://www.legco.gov.hk/yr07-08/english/panels/ea/minutes/ea080526.pdf

Information paper provided by the Administration for the Panel meeting on <u>15 July 2009</u> http://www.legco.gov.hk/yr08-09/english/panels/ea/papers/ea0715cb1-2197-4-e.pdf

<u>Minutes of the Panel meeting on 15 July 2009</u> http://www.legco.gov.hk/yr08-09/english/panels/ea/minutes/ea20090715.pdf

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