

立法會
Legislative Council

LC Paper No. CB(1) 1488/09-10
(These minutes have been seen
by the Administration)

Ref : CB1/BC/2/09/2

Bills Committee on Buildings Energy Efficiency Bill

Minutes of fourth meeting
held on Friday, 26 February 2010, at 3:30 pm
in Conference Room A of the Legislative Council Building

Members present : Hon Audrey EU Yuet-mee, SC, JP (Chairman)
Ir Dr Hon Raymond HO Chung-tai, SBS, S.B.St.J., JP
Hon Abraham SHEK Lai-him, SBS, JP
Hon Vincent FANG Kang, SBS, JP
Hon LEE Wing-tat
Prof Hon Patrick LAU Sau-shing, SBS, JP
Hon KAM Nai-wai, MH
Hon Cyd HO Sau-lan
Hon CHAN Hak-kan
Hon IP Kwok-him, GBS, JP

Public officers attending : Environment Bureau

Miss Katharine CHOI
Principal Assistant Secretary for the Environment
(Energy)

Miss Joceline CHUI
Assistant Secretary for the Environment (Energy) 3

Electrical and Mechanical Services Department

Mr Alfred SIT
Assistant Director/Electricity and Energy Efficiency

Mr LI Kwok-keung
Chief Engineer/Energy Efficiency B

Department of Justice

Miss Selina LAU
Senior Government Counsel

Miss Mandy NG
Government Counsel

Clerk in attendance : Miss Becky YU
Chief Council Secretary (1)1

Staff in attendance : Miss Kitty CHENG
Assistant Legal Adviser 5

Mr Franco KWONG
Council Secretary (1)1

I. Confirmation of minutes

(LC Paper No. CB(1) 1227/09-10 — Minutes of the meeting held on
28 January 2010)

The minutes of the meeting held on 28 January 2010 were confirmed.

II. Meeting with the Administration

(LC Paper No. CB(1) 1064/09-10(15) — List of follow-up actions arising
from the discussion at the meeting
on 28 January 2010

LC Paper No. CB(1) 1064/09-10(16) — Administration's response to
CB(1) 1064/09-10(15))

Relevant papers

(LC Paper No. CB(3) 233/09-10 — The Bill
Ref: ENB 24/26/22 — The Legislative Council Brief
LC Paper No. LS 24/09-10 — Legal Service Division Report
LC Paper No. CB(1) 840/09-10(01) — Background brief on Buildings
Energy Efficiency Bill)

2. The Bills Committee deliberated (Index of proceedings attached in **Annex**).

3. The Administration was requested to -
- (a) advise whether consideration could be given to regulating the unit electricity consumption of the four types of building services installations in order to achieve greater energy savings;
 - (b) provide samples of the declaration forms. To also advise the liability of individual owners who might not be aware of any non-compliance with the codes of practices as the developer concerned was only required to submit the stage two declaration within four months after the issue of occupation approval. To plug the loophole, consideration should be given to increasing the penalty for contravention by developers or withholding the issue of occupation approval until confirmation of compliance;
 - (c) advise the liability of individual owners in the event of non-compliance with the Certificate of Compliance Registration as a result of retrofitting works carried out by other parties within the 10-year validity period;
 - (d) advise the relevant provisions in the Bill which specified that the requirement for compliance with the code of practice in respect of a prescribed type of building services installation under a major retrofitting works project did not apply to other building services installations located within the same area;
 - (e) consider reducing the threshold for major retrofitting works to prevent evasion of the control regime through subcontracting;
 - (f) provide details of the voluntary Green Mark Scheme (particularly the scoring system) and the Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations of the Building Act adopted in Singapore and the United Kingdom respectively, and also advise whether reference could be drawn from Singapore to work out a similar award scheme for Hong Kong by comparing the buildings in both places;
 - (g) seek legal advice on the need for legislation to implement a grading system for buildings after the relevant data base of energy consumption of buildings had been put in place, and the legality of uploading the grading of buildings onto the website of the relevant department(s), and also advise the transitional arrangements required to replace the energy utilization index with grades in the Energy Audit Form following the implementation of the grading system for buildings; and

- (h) provide a paper setting out the anticipated changes/improvements to the four prescribed types of building services installation after enactment of the Bill.

III. Any other business

- 4. There being no other business, the meeting ended at 5:30 pm.

Council Business Division 1
Legislative Council Secretariat
29 March 2010

**Bills Committee on
Buildings Energy Efficiency Bill**

**Proceedings of the fourth meeting
on Friday, 26 February 2010, at 3:30 pm
in Conference Room A of the Legislative Council Building**

| Time marker | Speaker | Subject(s) | Action required |
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| <i>Agenda Item I - Confirmation of minutes</i> | | | |
| 000001 - 000023 | Chairman | The minutes of the meeting held on 28 January 2010 (LC Paper No. CB(1) 1227/09-10) were confirmed. | |
| <i>Agenda Item II - Meeting with the Administration</i> | | | |
| 000024 - 001433 | Chairman Administration | Administration's explanation on its response to members' concerns raised at the meeting on 28 January 2010 (LC Paper No. CB(1) 1064/09-10(16)). | |
| 001434 - 002835 | Chairman Mr LEE Wing-tat Administration | <p>Mr LEE Wing-tat's concern that the energy savings to be achieved as a result of implementation of the Bill would be very small as it only aimed to promote energy efficiency of the four prescribed types of building services installations. To achieve greater energy savings, the Administration should consider regulating the unit electricity consumption of the building services installations, or temperature of air-conditioners.</p> <p>Administration's response -</p> <p>(a) commercial buildings accounted for 66% of electricity consumption of existing buildings. The mandatory implementation of Building Energy Codes (BECs) for new buildings would result in 10% to 15% annual savings in energy bills;</p> <p>(b) regulation on the unit electricity consumption by building services installation was not practised in any overseas jurisdictions in view of the far-reaching implications on the public;</p> | The Administration to advise whether consideration could be given to regulating the unit electricity consumption of the four types of building services installations in order to achieve greater energy savings. |

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| | | <p>(c) there might be genuine cases which warranted a low indoor temperature, such as data centre for mainframe computers. Hence, BECs specified the minimum allowable coefficient of performance of air-conditioning equipment to enhance energy efficiency. This was also adopted by some overseas jurisdictions;</p> <p>(d) buildings were encouraged to install more control switches so that users could turn on only those electrical devices required, thereby achieving greater energy saving; and</p> <p>(e) publicity effort had been made to encourage the public to maintain the temperature setting of air-conditioned indoor areas at 25.5°C during summer months.</p> | |
| 002836 - 003820 | Mr KAM Nai-wai Administration Chairman | <p>Mr KAM Nai-wai's enquiry on the rationale for not able to estimate the extent of change in saving in electricity and carbon emissions by changing the threshold of 500 square meter (m²) for major retrofitting works as stated in paragraph 12 of LC Paper No. CB(1) 1064/09-10(16).</p> <p>Administration's response -</p> <p>(a) post-enactment buildings were required to comply with BECs at all times, while pre-enactment buildings would be required to comply with BECs during major retrofitting works covering a total floor area of not less than 500m²;</p> <p>(b) the anticipated energy saving of approximately 2.8 billion kWh and 1.96 million tones of carbon dioxide in the first decade of mandatory implementation of BECs were to be achieved by new buildings only;</p> | |

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| | | <p>(c) additional energy saving could be achieved by requiring compliance with BECs when existing buildings underwent major retrofitting works. However, the additional energy saving could hardly be estimated as major retrofitting works were to be conducted of owners' own accord;</p> <p>(d) the threshold for major retrofitting works was set taking into account the trades' views; and</p> <p>(e) reduction in the threshold would mean that the number of major retrofitting works that required a Form of Compliance (FOC) would increase.</p> <p>Mr KAM Nai-wai's further enquiry on the rationale for not including external lighting in the control regime.</p> <p>Administration's response -</p> <p>(a) the issue of external lighting involved not only the energy efficiency standard of lighting installation, but also the use, operation and shooting angle of those installations; and</p> <p>(b) a consultancy study on relevant issues was underway.</p> | |
| 003821 - 004623 | Ms Cyd HO Administration | Ms Cyd HO's concern about the double standard adopted by the Administration whereby individual owners were required to engage authorized persons to certify the replacement of windows, while this was not applicable to major retrofitting works covering covered a floor area of less than 500m ² . Besides, owners might be able to get round the threshold through subcontracting or splitting the contract into smaller ones. | The Administration to consider reducing the threshold for major retrofitting works to prevent evasion of the control regime through subcontracting. |

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| | | <p>Administration's response -</p> <p>(a) a more stringent requirement was adopted for replacement of windows on ground of public safety;</p> <p>(b) owners should have incentive to improve the energy efficiency of their buildings given the savings in energy bills in the long run. The only concern was that owners might need to engage Registered Energy Assessor to certify the works and apply for FOC; and</p> <p>(c) under Schedule 3 of the Bill, when the total floor area covered by a same series of major retrofitting works aggregated to not less than 500m² within 12 months, those major retrofitting works would also be required to comply with BEC.</p> | |
| 004624 - 005649 | Prof Patrick LAU Chairman Administration | <p>Prof Patrick LAU's enquiry on the purpose of the stage one declaration.</p> <p>Administration's response that under clause 8 of the Bill, the declaration was to certify that suitable design provisions would be incorporated into planning and design of the building in accordance with the specified standards and requirements.</p> <p>Prof Patrick LAU's further enquiries on the liability of individual owners in the event of non-compliance with the Certificate of Compliance Registration (COCR) as a result of retrofitting works carried out by other parties within the 10-year validity period, and the efficacy of energy audit.</p> <p>Administration's response -</p> <p>(a) clause 12 of the Bill set out the liabilities of building owners and responsible persons of buildings with COCR to maintain the relevant building services</p> | The Administration to advise the liability of individual owners in the event of non-compliance with COCR as a result of retrofitting works carried out by other parties within the 10-year validity period. |

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| | | <p>installations to a standard not lower than that applied in the first COCR; and</p> <p>(b) energy audit would enable owners to identify means through which the energy efficiency of their buildings could be enhanced.</p> | |
| 005650 - 010640 | Mr IP Kwok-him Administration Chairman | <p>Mr IP Kwok-him's concern that pre-enactment buildings would eventually be required to follow all the requirements applicable to post-enactment buildings in the long run as in the case of the Fire Services Ordinance (Cap. 95).</p> <p>Administration's confirmation that pre-enactment buildings would only be required to comply with the Bill when major retrofitting works were carried out.</p> <p>Mr IP Kwok-him's further enquiry on liability of individual owners in the event of non-compliance with the stage two declaration.</p> <p>Administration's clarification that it was the liability of developers to submit the stage two declaration, not individual owners.</p> | |
| 010641 - 011501 | Mr LEE Wing-tat Administration Chairman | <p>Mr LEE Wing-tat's enquiry on the feasibility of setting up a grading system for energy efficiency of buildings as the case of Australia and Singapore.</p> <p>Administration's response -</p> <p>(a) the energy utilization index (EUI) in the energy audit form would provide useful reference on the energy performance of buildings. The requirement for the form to be exhibited in a conspicuous position at the main entrance of buildings would encourage owners to improve the energy efficiency of their buildings; and</p> | |

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| | | <p>(b) the mandatory energy audit requirement under the Bill would enable the Administration to collect the necessary information for building up relevant database of energy consumption of buildings, which was requisite for the setting up of a grading system.</p> | |
| 011502 - 011802 | Ms Cyd HO Administration Chairman | <p>Ms Cyd HO's enquiry on the effect of retrofitting works involving the addition or replacement of a main component of a central building services installation.</p> <p>Administration's response -</p> <p>(a) electrical circuit at rating of 400A or above was equivalent to the electricity supply to a floor with eight medium sized residential units; and</p> <p>(b) a unitary air-conditioner or air-conditioning chiller of a cooling or heating rating at or exceeding 350 kW was equivalent to the total rating of air-conditioners of 50 households (assuming two air-conditioners of 1.5 horsepower per household).</p> | |
| 011803- 013014 | Mr IP Kwok-him Administration Chairman Chan Hak-kan | <p>Mr IP Kwok-him's view and concern -</p> <p>(a) the proposed penalty of \$1 million for failure to submit declarations by developers was too light to have any deterrent effect;</p> <p>(b) the liability of individual owners who might not be aware of any non-compliance with BECs as the developer concerned was only required to submit the stage two declaration within four months after the issue of occupation approval; and</p> <p>(c) consideration should be given to withholding the issue of occupation approval until confirmation of</p> | <p>The Administration to -</p> <p>(a) provide samples of the declaration forms;</p> <p>(b) advise the liability of individual owners who might not be aware of any non-compliance with the codes of practices as the developer concerned was only required to submit the stage two declaration</p> |

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| | | <p>compliance.</p> <p>Administration's response -</p> <p>(a) developers would still be liable for compliance with BECs even after the buildings were sold to individual owners;</p> <p>(b) there was unanimous objection to pegging the occupation approval to compliance with BECs during consultation with the trades; and</p> <p>(c) consideration could be given to increasing the level of penalty.</p> <p>Mr CHAN Hak-kan's concern that developers might embezzle the management fund to carry out improvement works to comply with BECs. Individual owners might not be aware of the embezzlement since no owners' corporations could be set up at the time of intake.</p> <p>Mr IP Kwok-him's concern about the additional financial burden on owners of pre-enactment buildings if they had to ensure compliance of all the building services installations with BECs during major retrofitting works.</p> <p>The Administration's response that the requirement for compliance with BEC in respect of a prescribed type of building services installation under a major retrofitting works project did not apply to other building services installations located within the same area.</p> | <p>within four months after the issue of occupation approval. To plug the loophole, consideration should be given to increasing the penalty for contravention by developers or withholding the issue of occupation approval until confirmation of compliance; and</p> <p>(c) advise the relevant provisions in the Bill which specified that the requirement for compliance with the code of practice in respect of a prescribed type of building services installation under a major retrofitting works project did not apply to other building services installations located within the same area.</p> |
| 013015 - 013816 | Chairman Administration Prof Patrick LAU | <p>Chairman's enquiry on how could ensure a COCR is in force at all time.</p> <p>Administration's response that individual owners had the duty to renew COCR every 10 years. To ensure successful renewal, it was essential for owners to ensure proper maintenance of the building services installations.</p> | |

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| 013817 - 014120 | Mr Vincent FANG Chairman Administration | <p>Mr Vincent FANG's view and enquiry -</p> <p>(a) need to clearly define major retrofitting works;</p> <p>(b) whether glass panels used in commercial buildings would be covered under the Bill.</p> <p>Administration's response -</p> <p>(a) Schedule 3 of the Bill defined major retrofitting works. Technical details of major retrofitting works would be elaborated in the code of practice to be issued; and</p> <p>(b) the Bill did not cover the use of construction materials, which were governed by the Building (Energy Efficiency) Regulation (Cap. 123M).</p> | |
| 014121 - 015309 | Mr LEE Wing-tat Administration Chairman | <p>Mr LEE Wing-tat's enquiries -</p> <p>(a) whether information collected from Hong Kong Energy Efficiency Registration Scheme for Buildings (HKEERSB) was sufficient for setting a grading system for buildings without having to await the establishment of the proposed database; and</p> <p>(b) whether reference from other cities with similar latitude as Hong Kong could be used.</p> <p>Administration's response -</p> <p>(a) information collected from HKEERSB was insufficient to build up the database given the low participation rate;</p> <p>(b) building energy efficiency would be affected by various factors, such as weather and population density etc. Direct application of grading systems from other</p> | <p>The Administration to -</p> <p>(a) provide details of the voluntary Green Mark Scheme (particularly the scoring system) and the Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations of the Building Act adopted in Singapore and the United Kingdom respectively;</p> <p>(b) advise whether reference could be drawn from Singapore to work out a similar award scheme for Hong</p> |

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| | | <p>jurisdictions to Hong Kong might not be appropriate;</p> <p>(c) the information collected from energy audit would be more suitable for building up the database; and</p> <p>(d) energy audits for commercial buildings would commence shortly after enactment of Bill. It was expected that the database could be built up within a few years.</p> <p>Mr LEE Wing-tat's enquiries on the need for legislation to implement the grading system, and whether the grading of buildings could be uploaded onto the website of the relevant departments for public inspection.</p> <p>Administration's response that the grading system could be implemented through administrative measures.</p> <p>Chairman's enquiries -</p> <p>(a) whether a award scheme similar to the voluntary Green Mark Scheme adopted in Singapore could be worked out for Hong Kong by comparing the buildings in both places;</p> <p>(b) whether legislation similar to the Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations of the Building Act adopted in the United Kingdom could be adopted in Hong Kong; and</p> <p>(c) the transitional arrangements required to replace EUI with grades in the energy audit form following the implementation of the grading system for buildings.</p> | <p>Kong by comparing the buildings in both places;</p> <p>(c) seek legal advice on the need for legislation to implement a grading system for buildings after the relevant data base of energy consumption of buildings had been put in place, and the legality of uploading the grading of buildings onto the website of the relevant department(s);</p> <p>(d) advise the transitional arrangements required to replace EUI with grades in the energy audit form following the implementation of the grading system for buildings.</p> |

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| | | <p>Administration's response -</p> <p>(a) apart from the Building Environmental Assessment Method adopted by buildings voluntarily at present, the recently launched Hong Kong Green Building Council would develop a distinctive green building assessment method for buildings in Hong Kong. Similar to the Green Mark Scheme adopted in Singapore, these building assessment systems would assess the environmental performance of buildings under various aspects such as energy efficiency, site aspect, materials, water etc.; and</p> <p>(b) legislation was not required to change the energy audit form which could be done administratively.</p> | |
| 015310 - 015910 | Ms Cyd HO Administration Chairman Mr IP Kwok-him | <p>Ms Cyd HO's enquiry on the scope of major retrofitting works in respect of lift and escalator installation.</p> <p>Administration's explanation that addition and replacement of motor drive and mechanical drive of a lift, an escalator or a passage conveyor would be classified as major retrofitting works.</p> <p>Chairman enquiry on the anticipated changes/improvement to the four prescribed types of building services installations following the enactment of the Bill.</p> <p>Administration's response -</p> <p>(a) most of the building services installations in the market could meet the energy efficiency standards of BECs; and</p> <p>(b) relevant trades were well aware of the need to comply with BECs.</p> | The Administration to provide a paper setting out the anticipated changes/improvements to the four prescribed types of building services installation after enactment of the Bill. |