

立法會
Legislative Council

LC Paper No. CB(1) 1227/09-10
(These minutes have been seen
by the Administration)

Ref : CB1/BC/2/09/2

**Bills Committee on
Buildings Energy Efficiency Bill**

**Minutes of second meeting
held on Thursday, 28 January 2010, at 8:30 am
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 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
- Members absent** : Hon Abraham SHEK Lai-him, SBS, JP
Hon Vincent FANG Kang, SBS, JP
Hon Tanya CHAN
- 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

Mr Gilbert MO
Deputy Law Draftsman (Bilingual Drafting &
Administration)

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) 938/09-10 — Minutes of the meeting held on
8 January 2010)

The minutes of the meeting held on 8 January 2010 were confirmed.

II. Meeting with the Administration

(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 the basis upon which the anticipated energy savings of 2.8 billion kilowatt hours and reduction of 1.96 million tonnes of carbon dioxide (CO₂) emissions resulting from the proposed mandatory implementation of the Building Energy Codes (BECs) was arrived at;

(b) provide the views collected during the public consultation exercise on the proposed mandatory implementation of BECs;

(c) advise the differences between the voluntary Hong Kong Energy Efficiency Registration Scheme for Buildings and the control regime under the Bill.

To also advise whether consideration would be given to setting a minimum level of energy efficiency for buildings;

- (d) provide a paper comparing Hong Kong and other cities with similar latitude in enhancing energy efficiency of buildings as a measure to mitigate climate change;
- (e) advise the rationale for not including residential buildings in the Bill;
- (f) set out in tabular form the current energy consumption of the different types of prescribed buildings and the energy savings and CO₂ reduction to be achieved following the implementation of the Bill. To also include in the form the current energy consumption of residential buildings and the energy savings and CO₂ reduction to be achieved if these buildings were included in the Bill;
- (g) advise the differences in energy savings and CO₂ reduction if the threshold of 500 square metres (m²) was reduced to 200 m²;
- (h) advise the energy consumption of different electrical installations in buildings. To also advise the rationale for not regulating the building design and construction materials as these would affect the energy efficiency of buildings;
- (i) advise the rationale for not regulating lighting installations outside buildings;
- (j) advise the liabilities between individual owners and Owners' Corporations (OCs) under the Bill;
- (k) consider providing assistance (such as loan) to facilitate compliance with the proposed control regime by owners, particularly those of older and smaller developments, the loan of which could be deducted from electricity tariffs. Consideration should also be given to extending the two existing funding schemes to assist buildings owners in complying with the Bill;
- (l) consider putting in place a grading scheme and an award scheme for buildings according to their energy efficiency performance;
- (m) provide the draft practice guidelines and a sample of the energy audit forms;
- (n) explain why improvement measures as recommended in the energy audit forms were not mandatory;
- (o) advise the rationale for exempting small houses from the Bill; and
- (p) advise the parts of the Sustainable Development Strategy and Building (Energy Efficiency) Regulation (Cap. 123 sub. leg. M) which were relevant to the Bill.

III. Any other business

4. There being no other business, the meeting ended at 10:30 am.

Council Business Division 1
Legislative Council Secretariat
24 February 2010

**Bills Committee on
Buildings Energy Efficiency Bill**

**Proceedings of the second meeting
on Thursday, 28 January 2010, at 8:30 am
in Conference Room A of the Legislative Council Building**

Time marker	Speaker	Subject(s)	Action required
<i>Agenda Item I - Confirmation of minutes</i>			
000030 - 000129	Chairman	The minutes of the meeting held on 8 January 2010 (LC Paper No. CB(1)938/09-10) were confirmed.	
<i>Agenda Item II - Meeting with the Administration</i>			
000130 - 001759	Chairman Administration	Power-point presentation on the Buildings Energy Efficiency Bill (the Bill) (LC Paper No. CB(1)1032/09-10(01))	
001800 - 002654	Prof Patrick LAU Administration Chairman	<p>Prof Patrick LAU's views -</p> <p>(a) the Bill was quite disturbing, particularly if residential units were required to comply with the Building Energy Codes (BECs) during major retrofitting works, given that renovation works in residential units with floor area of more than 500 square metres (m²) were not uncommon in Hong Kong;</p> <p>(b) all technical requirements should be spelt out in Bill rather than in the "practice notes to authorized persons" (AP notes) to avoid further confusion; and</p> <p>(c) energy audits were not commonly required in overseas countries.</p> <p>Administration's response -</p> <p>(a) for existing residential buildings, the Bill only applied to their common areas when major retrofitting works were carried out by owners of their accords covering a total floor area of not less than 500 m². Individual residential units would not be covered by the Bill irrespective of their sizes;</p>	

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		<p>(b) two codes of practice, one for building energy efficiency standards and one for energy audits, would be promulgated to facilitate compliance with the Bill by the trades; and</p> <p>(c) mandatory energy audit requirements were adopted in several overseas jurisdictions, including the European Union, and in some states of USA and Canada.</p>	
002655 - 003129	Ir Dr Raymond HO Administration	<p>Ir Dr Raymond HO's concerns and enquiries -</p> <p>(a) small and medium enterprises (SMEs) might need to relocate their businesses upon expiry of tenancy agreements, thereby giving rise to major retrofitting works. Many SMEs, particularly restaurateurs, would be caught under the Bill if the threshold was set at 500 m²;</p> <p>(b) whether the trades had been consulted on the threshold; and</p> <p>(c) the means through which SMEs would be made aware of the requirements under the Bill.</p> <p>Administration's response -</p> <p>(a) a Trade Task Force and a Technical Task Force comprising representatives from different sectors had been set up to gauge views on the detailed arrangements of the legislative proposal;</p> <p>(b) a Business Impact Assessment (BIA) on the impacts of the legislative proposal had been conducted. Various stakeholders, including SMEs and restaurant operators, had been invited to express their views on the proposal. Having considered their views, the threshold for major retrofitting works had been adjusted upward from 200 m² to 500 m²; and</p>	

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		(c) publicity would be stepped up after enactment of the Bill.	
003420 - 004309	Mr KAM Nai-wai Administration	<p>Mr KAM Nai-wai's enquiries -</p> <p>(a) the basis upon which the anticipated energy savings of 2.8 billion kilowatt hours and reduction of 1.96 billion tonnes of carbon dioxide (CO₂) emissions resulting from the proposed mandatory implementation of BECs was arrived at;</p> <p>(b) the differences in energy savings and CO₂ reduction if the threshold of 500 m² was reduced to 200 m²;</p> <p>(c) the views collected during the consultation exercise on the proposed mandatory implementation of BECs;</p> <p>(d) the rationale for not including residential units in the Bill; and</p> <p>(e) the reason for not putting in place a grading scheme and an award scheme for buildings according to their energy efficiency performance.</p> <p>Administration's response -</p> <p>(a) a separate paper would be provided to address Mr KAM's enquiries;</p> <p>(b) prescribed building services installations in individual units of non-residential and non-industrial buildings and indoor common areas of Post-enactment Buildings were required to comply with BEC requirements at all times. For prescribed major retrofitting works in an individual unit of non-residential and non-industrial buildings or a common area with an internal floor area of 500 m² or above in both Post-enactment Buildings and Pre-enactment Buildings, responsible persons were required to obtain a Form of Compliance (FOC) certified by a Registered Energy Assessor (REA). However, responsible persons of units</p>	<p>The Administration to -</p> <p>(a) advise the basis upon which the anticipated energy savings of 2.8 billion kilowatt hours and reduction of 1.96 million tonnes of CO₂ emissions resulting from the proposed mandatory implementation of BECs was arrived at;</p> <p>(b) provide the views collected during the public consultation exercise on the proposed mandatory implementation of BECs;</p> <p>(c) advise the rationale for not including residential buildings in the Bill;</p> <p>(d) advise the differences in energy savings and CO₂ reduction if the threshold of 500 m² was reduced to 200 m²; and</p> <p>(e) consider putting in place a grading scheme and an award scheme for buildings according to their energy efficiency performance.</p>

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		<p>or common areas with an internal floor area of less than 500 m² would not be required to obtain a FOC to avoid overburdening SMEs with the relevant costs of employing REA;</p> <p>(c) residential units were exempted because major building services installations used in these premises, such as room air-conditioners, refrigerators and compact fluorescent lamps, had already been subject to the energy efficiency labelling requirements under the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598);</p> <p>(d) following the upward adjustment of the threshold from 200 m² to 500 m², around 6% more of the individual units in Pre-enactment Buildings were excluded from the application of the Bill; and</p> <p>(e) energy audits would help ascertain building energy performance data with a view to set up a grading scheme for buildings in future.</p>	
004310 - 005039	Ms Cyd HO Administration	<p>Ms Cyd HO's concerns and enquiries -</p> <p>(a) how to delineate the liabilities between individual owners and Owners' Corporations (OCs) under the Bill;</p> <p>(b) need to regulate building design and use of construction materials which could significantly affect the energy efficiency of buildings;</p> <p>(c) need to set out the maximum rated capacity for different building service installation, such as maximum luminosity of lighting; and</p> <p>(d) consideration should be given to providing assistance (such as loan) to owners, particularly those of older and smaller developments. The loan could be deducted from future saving in electricity tariffs.</p>	<p>The Administration to -</p> <p>(a) advise the liabilities between individual owners and OCs under the Bill;</p> <p>(b) advise the energy consumption of different electrical installations in buildings; and</p> <p>(c) consider providing assistance (such as loan) to facilitate compliance with the proposed control regime by owners, particularly those of older and smaller developments, the loan of which could</p>

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		<p>Administration's response -</p> <p>(a) liabilities between individual owners and OCs/co-owners in respect of individual units and common areas were set out in the deeds of mutual covenant;</p> <p>(b) the object of the Bill was to require compliance with BECs concerning four key types of building service installations, including air-conditioning, electrical, lift and escalator, as well as lighting installations;</p> <p>(c) BECs had stipulated the minimum energy efficiency standards of building services installations in buildings, such as the electrical power of lighting per m²;</p> <p>(d) building design and use of material would affect the "overall thermal transfer value" of buildings, which were governed by the Building (Energy Efficiency) Regulation (Cap. 123M);</p> <p>(e) the Council for Sustainable Development had recently completed a public engagement exercise on "Building Design to Foster a Quality and Sustainable Built Environment" which covered energy efficient building design; and</p> <p>(f) owners who wished to upgrade the energy efficiency performance of their buildings could apply for subsidies on a matching basis under the \$450 million Building Energy Efficiency Funding Schemes (BEEFS). Possible extension of the Schemes would be reviewed after enactment of the Bill.</p>	<p>be deducted from saving in electricity tariffs.</p> <p>Consideration should also be given to extending the two existing funding schemes to assist buildings owners in complying with the Bill.</p>
005040 - 010226	Mr LEE Wing-tat Administration Chairman	<p>Mr LEE Wing-tat's view that the Bill should also regulate building design and use of construction materials which would affect the energy efficiency of buildings.</p> <p>Mr LEE's further enquiries -</p> <p>(a) electricity consumption of different</p>	<p>The Administration to -</p> <p>(a) set out in tabular form the current energy consumption of the different types of prescribed buildings and the</p>

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		<p>installations; and</p> <p>(b) energy savings resulting from the Bill.</p> <p>Administration's response -</p> <p>(a) the Bill was formulated after consultation with stakeholders. It would not be appropriate to extend the coverage without further consultation;</p> <p>(b) energy efficient building design would be considered in the context of "Building Design to Foster a Quality and Sustainable Built Environment";</p> <p>(c) lighting and air-conditioning installations accounted for some 15%-20% and 50% of electricity consumption in commercial buildings respectively; and</p> <p>(d) about 10% to 15% annual savings in energy bills could be achieved in a Post-enactment Building as a result of mandatory implementation of BECs.</p> <p>Chairman's requests -</p> <p>(a) a table showing the current energy consumption of the different types of prescribed buildings and the energy savings and CO₂ reduction to be achieved following the implementation of the Bill; and</p> <p>(b) the rationale for not regulating the building design and construction materials.</p>	<p>energy savings and CO₂ reduction to be achieved following the implementation of the Bill; and</p> <p>(b) advise the rationale for not regulating the building design and construction materials as these would affect the energy efficiency of buildings.</p>
010227 - 010927	Prof Patrick LAU Administration	<p>Prof Patrick LAU's enquiry on the feasibility of amalgamating the Building Environmental Assessment Method (BEAM) and BECs.</p> <p>Administration's response that BEAM comprised a set of criteria for assessing the environmental and sustainability performance of buildings in respect of building orientation/access, energy efficiency, material use, water & waste management, indoor environmental quality and new technology adoption. BEAM</p>	

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		<p>was under review by the Hong Kong Green Building Council and the Administration would keep abreast of the latest development.</p>	
010928 - 011741	Mr KAM Nai-wai Administration Chairman	<p>Mr KAM Nai-wai's enquiries -</p> <p>(a) how to assist owners to ensure compliance with BECs in a cost-effective manner;</p> <p>(b) consideration should be given to extending BEEFS to assist compliance with BECs by owners; and</p> <p>(c) an award scheme should be set up to encourage owners to improve the energy efficiency of their buildings.</p> <p>Administration's response -</p> <p>(a) details of requirements under BECs would be set out in the codes of practice; and</p> <p>(b) owners should compare the prices of different quotations submitted by potential contractors to ensure cost-effectiveness.</p>	
011742 - 013308	Ms Cyd HO Administration Chairman	<p>Ms Cyd HO's views and enquiries -</p> <p>(a) the Bill should regulate the use of construction materials as this could significantly improve energy efficiency;</p> <p>(b) need to simplify the procedures for low-rise buildings with limited number of residential units; and</p> <p>(c) the control regime on indoor lighting installations should be similarly extended to cover outdoor lighting installations</p> <p>Administration's response -</p> <p>(a) energy efficiency of building could be affected by various factors, including the overall thermal transfer value of the building façade, building services installations, usage and operating</p>	<p>The Administration to -</p> <p>(a) advise the differences between the voluntary HKEERSB and the control regime under the Bill;</p> <p>(b) advise whether consideration would be given to setting a minimum level of energy efficiency for buildings; and</p> <p>(c) advise the rationale for not regulating lighting installations outside buildings.</p>

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		<p>patterns and alike. It might not be possible to formulate a single bill to cover all these factors; and</p> <p>(b) the Bill would not apply to residential units in Pre-enactment Buildings even when there were major retrofitting works carried out by owners of their own accord;</p> <p>(c) "lighting installation" under the Bill referred to "a fixed electrical lighting system in the building". Lighting installations for decoration or visual production were exempted in accordance with Schedule 2 to the Bill; and</p> <p>(d) a consultancy study on the impact of external lighting in Hong Kong was underway.</p> <p>Ms Cyd HO's query about the rationale for not regulating outdoor lighting installations when escalators extended from buildings to outside were covered under the Bill.</p> <p>Administration's response that the coverage of the Bill generally was in line with the existing voluntary Hong Kong Energy Efficiency Registration Scheme for Buildings (HKEERSB), of which the trades were quite familiar with.</p> <p>Chairman's request for a comparison between the control regime under the Bill and that under the voluntary HKEERSB.</p>	
013309 - 014834	Mr LEE Wing-tat Chairman Administration	<p>Mr LEE Wing-tat's enquiries -</p> <p>(a) the low participation rate of HKEERSB;</p> <p>(b) how Hong Kong compare with other cities with similar latitude in enhancing energy efficiency of buildings; and</p> <p>(c) the feasibility of conducting energy audit more frequently to take heed of the technological advancement in energy saving technologies.</p>	<p>The Administration to -</p> <p>(a) provide a paper comparing Hong Kong and other cities with similar latitude in enhancing energy efficiency of buildings as a measure to mitigate climate change; and</p> <p>(b) explain why improvement</p>

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		<p>Administration's response -</p> <p>(a) developers or landlords would have little incentive to improve the energy efficiency of buildings as the savings in energy bills would be shared among the tenants or occupants in the future. Hence, the participation rate of the private sector in the voluntary HKEERSB was low; and</p> <p>(b) the requirement for conducting energy audit once every 10 years was in line with the 10-year validity of the “Energy Performance Certificate” of the European Union.</p> <p>Chairman's enquiry on consequences of non-compliance with the recommendations set out in the energy audit reports.</p> <p>Administration's response that through energy audits, building users could understand the energy performance of their buildings, and identify opportunities for enhancing energy efficiency and achieving energy savings. As some recommendations in the audit reports might have significant cost implication on owners, implementation of such recommendations was not made mandatory.</p> <p>Mr LEE Wing-tat's query about the effectiveness of energy audits if recommendations were not mandatory.</p> <p>Administration's response that the energy audit forms were to be exhibited in a conspicuous position at the main entrance of the buildings. Prospective buyers or tenants would be able to know the energy performance of the buildings to make an informed decision. Besides, improvement measures recommended in the audit reports were also not mandatory in other countries.</p>	<p>measures as recommended in the energy audit reports were not mandatory.</p>
014835 - 015314	Chairman Administration	<p>Chairman's request and enquiry -</p> <p>(a) a sample of the energy audit form; and</p> <p>(b) action against non-compliance with BECs by Post-enactment Buildings.</p>	<p>The Administration to provide a sample of the energy audit form.</p>

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		<p>Administration's response -</p> <p>(a) developers were requested to submit two self-declarations, the first to declare that suitable design provisions had been included to meet the BEC requirements and the second to confirm compliance with the requirements;</p> <p>(b) improvement notice would be issued to require owners to take remedial actions in the event of non-compliance; and</p> <p>(c) the requirement for renewal of the Certificate of Compliance Registration every 10 years would ensure the continued compliance with BECs.</p>	
015315 - 015718	Mr KAM Nai-wai Chairman Administration	<p>Mr KAM Nai-wai's enquiries -</p> <p>(a) whether the control on Pre-enactment Buildings was adequate; and</p> <p>(b) the progress of BEEFS.</p> <p>Administration's response -</p> <p>(a) Pre-enactment Buildings would need to comply with BECs when prescribed major retrofitting works were carried out; and</p> <p>(b) over \$45 million had been approved under BEEFS so far. Possible extension of the Schemes would be reviewed after enactment of the Bill.</p>	
015719 - 020053	Ms Cyd HO Administration	<p>Ms Cyd HO's requests and enquiries -</p> <p>(a) the draft practice guidelines;</p> <p>(b) the relevant part of the Sustainable Development Strategy;</p> <p>(c) the relevant part of the Building (Energy Efficiency) Regulation (Cap. 123M); and</p> <p>(d) rationale for exempting small houses from the Bill</p>	<p>The Administration to -</p> <p>(a) provide the draft practice guidelines;</p> <p>(b) advise the parts of the Sustainable Development Strategy and Building (Energy Efficiency) Regulation (Cap. 123 sub. leg. M) which were relevant</p>

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			to the Bill; and (c) advise the rationale for exempting small houses from the Bill.
020054 - 020145	Chairman	Next meeting would be held on 9 February 2010 at 2:30 pm to meet with deputations and the Administration.	

Council Business Division 1
Legislative Council Secretariat
24 February 2010