

立法會
Legislative Council

LC Paper No. CB(1) 1351/09-10
(These minutes have been seen
by the Administration)

Ref : CB1/BC/2/09/2

**Bills Committee on
Buildings Energy Efficiency Bill**

**Minutes of third meeting
held on Tuesday, 9 February 2010, at 2:30 pm
in the Chamber 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 IP Kwok-him, GBS, JP
- Member absent** : Hon CHAN Hak-kan
- 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

**Attendance by
Invitation**

: The Association of Consulting Engineers of Hong Kong

Mr Colin CHUNG
Honorary Treasurer

Hong Kong General Chamber of Commerce

Mr David NG
Member

The Hong Kong Polytechnic University

Prof Francis YIK

Institution of Mechanical Engineers (Hong Kong Branch)

Ir Dr C W TSO
Immediate Past Chairman

Friends of the Earth (HK)

Mr Edwin LAU
Director

Greenpeace China

Mr Prentice KOO
Campaigner

Professional Green Building Council

Ir Victor CHEUNG
Council Member and Chairman of Board of Public Affairs

The Federation of Hong Kong Hotel Owners

Mr Michael LI, BBS, JP
Executive Director

Building Services Operation and Maintenance Executives Society

Ir K F YEE
President

ASHRAE Hong Kong Chapter

Dr Sam HUI
Governors

The Hong Kong Federation of Electrical and Mechanical Contractors Ltd

Mr HO Pun-hing
Technical Advisor

Civic Party

Mr Paul ZIMMERMAN
Vice Chairman, Environment & Sustainable Development Branch

The Institution of Engineering and Technology Hong Kong

Mr M S KWAN
Vice-Chairman, Power and Energy Section

The University of Hong Kong

Prof Stephen LAU
Associate Professor

Federation of Hong Kong Industries

Mr Martin TAM
General Committee Member

Hong Kong Association of Energy Engineers

Ir Eric LAU
Director

Hong Kong Electrical Contractors' Association Ltd

Mr FUNG Kwai-kin
Honorary Secretary

BEAM Society

Mr John HERBERT
Executive Committee Member

Lift and Escalator Contractors Association

Mr YIP Sai-wa
Member of Technical Subcommittee

WWF Hong Kong

Dr William YU
Head of Climate Program

The Chartered Institution of Building Services Engineers
(Hong Kong Branch)

Ir Victor LEUNG
Immediate Past Chairman

Energy Institute (Hong Kong Branch)

Mr Michael LEUNG
Chairman

Asian Institute of Intelligent Buildings

Mr PAU Wai-keung
Council Chairman

Estates Offices/Facilities Management Offices of
Universities

Ir K Y WONG
Representative of Estates and Facilities Management
Offices of all Local Universities

Hong Kong Hotels Association - Hotel Engineers
Committee

Mr Martin WAN
Secretary

CIE (Hong Kong) Ltd

Mr CHUNG Tse-ming
Honorary Secretary

The Hong Kong Air Conditioning and Refrigeration Association Ltd

Mr Dave CHAN
Vice President

The Hong Kong Institution of Engineers

Ir Dr F C CHAN
Vice President

The Hong Kong Institute of Facility Management

Dr Eric CHAN
Vice President

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

Miss Mandy POON
Legislative Assistant (1)4

I. Meeting with deputations and the Administration

Meeting with deputations

The Chairman invited views from the following deputations -

- (i) The Association of Consulting Engineers of Hong Kong
- (ii) Hong Kong General Chamber of Commerce
- (iii) The Hong Kong Polytechnic University
- (iv) Institution of Mechanical Engineers (Hong Kong Branch)
(LC Paper No. CB(1) 1064/09-10(01))

- (v) Friends of the Earth (HK)
(LC Paper No. CB(1) 1064/09-10(02)
LC Paper No. CB(1) 1120/09-10(01) — Joint submission from
Friends of the Earth (HK),
Greeners Action, Green
Sense, Greenpeace and
WWF Hong Kong
(Chinese version only))
- (vi) Greenpeace China
(LC Paper No. CB(1) 1064/09-10(03))
- (vii) Professional Green Building Council
(LC Paper No. CB(1) 1064/09-10(04) — Joint submission from
WWF Hong Kong and
Professional Green
Building Council (English
version only))
- (viii) The Federation of Hong Kong Hotel Owners
- (ix) Building Services Operation and Maintenance Executives Society
(LC Paper No. CB(1) 1120/09-10(02))
- (x) ASHRAE Hong Kong Chapter
- (xi) The Hong Kong Federation of Electrical and Mechanical Contractors
Ltd
- (xii) Civic Party
(LC Paper No. CB(1) 1064/09-10(05))
- (xiii) The Institution of Engineering and Technology Hong Kong
(LC Paper No. CB(1) 1138/09-10(01))
- (xiv) The University of Hong Kong
(LC Paper No. CB(1) 1138/09-10(02))
- (xv) Federation of Hong Kong Industries
(LC Paper No. CB(1) 1138/09-10(03))
- (xvi) Hong Kong Association of Energy Engineers
(LC Paper No. CB(1) 1138/09-10(04))
- (xvii) Hong Kong Electrical Contractors' Association Ltd
(LC Paper No. CB(1) 1064/09-10(06))
- (xviii) BEAM Society
(LC Paper No. CB(1) 1064/09-10(07))

- (xix) Lift and Escalator Contractors Association
- (xx) WWF Hong Kong
(LC Paper No. CB(1) 1064/09-10(04) — Joint submission from WWF Hong Kong and Professional Green Building Council (English version only))
- (xxi) The Chartered Institution of Building Services Engineers (Hong Kong Branch)
- (xxii) Energy Institute (Hong Kong Branch)
(LC Paper No. CB(1) 1138/09-10(05))
- (xxiii) Asian Institute of Intelligent Buildings
(LC Paper No. CB(1) 1138/09-10(06))
- (xxiv) Estates Offices / Facilities Management Offices of Universities
(LC Paper No. CB(1) 1138/09-10(07))
- (xxv) Hong Kong Hotels Association - Hotel Engineers Committee
- (xxvi) CIE (Hong Kong) Ltd
- (xxvii) The Hong Kong Air Conditioning and Refrigeration Association Ltd
(LC Paper No. CB(1) 1138/09-10(08))
- (xxviii) The Hong Kong Institution of Engineers
(LC Paper No. CB(1) 1064/09-10(08))
- (xxix) The Hong Kong Institute of Facility Management

Submissions from deputations not attending the meeting

- (LC Paper No. CB(1) 1064/09-10(09) — Submission from Energy Efficiency and Conservation Subcommittee of the Energy Advisory Committee
- LC Paper No. CB(1) 1064/09-10(10) — Submission from Advisory Council on the Environment
- LC Paper No. CB(1) 1064/09-10(11) — Submission from CLP Power Hong Kong Ltd (English version only)
- LC Paper No. CB(1) 1064/09-10(12) — Submission from Hong Kong Institute of Surveyors (English version only)
- LC Paper No. CB(1) 1064/09-10(13) — Submission from Construction Industry Council (English version only)
- LC Paper No. CB(1) 1064/09-10(14) — Submission from Green Council (English version only)

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

Ref: ENB 24/26/22

LC Paper No. LS 24/09-10

LC Paper No. CB(1) 840/09-10(01)

— The Bill

— The Legislative Council Brief

— Legal Service Division Report

— Background brief on Buildings Energy Efficiency Bill)

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

II. Any other business

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

Council Business Division 1
Legislative Council Secretariat
9 March 2010

**Bills Committee on
Buildings Energy Efficiency Bill**

**Proceedings of the third meeting
on Tuesday, 9 February 2010, at 2:30 pm
in the Chamber of the Legislative Council Building**

Time marker	Speaker	Subject(s)	Action required
<i>Agenda Item I - Meeting with deputations and the Administration</i>			
000150 - 000636	Chairman Dr William YU, WWF Hong Kong	Expression of views (LC Paper No. CB(1) 1064/09-10(04))	
000637 - 000826	Mr Colin CHUNG, The Association of Consulting Engineers of Hong Kong (ACEHK)	Expression of views - (a) supported the Bill in principle since buildings comprised the largest share of electricity consumption in Hong Kong; (b) the design, installation and operation of building services installations should meet the prescribed standards; and (c) Hong Kong had lagged behind many overseas countries and the Mainland in implementing mandatory Building Energy Codes (BECs).	
000827 - 001015	Mr David NG, Hong Kong General Chamber of Commerce	Expression of views - (a) support for the Bill; (b) energy audits for major retrofitting works which had obtained Forms of Compliance (FOC) should follow that for Post-enactment Buildings i.e. once every 10 years; (c) the requirement to exhibit energy audit form in a conspicuous position at the main entrance under clause 23 of the Bill would affect the aesthetic of buildings; and (d) need to set up a database on energy efficiency	
001016 - 001227	Prof Francis YIK, The Hong Kong Polytechnic University	Expression of views - (a) support for the Bill to improve energy efficiency of buildings to help combat global warming; and	

Time marker	Speaker	Subject(s)	Action required
		(b) the Bill should be enacted without delay, particularly after China had announced the target to reduce carbon emission by some 40% in 2020 using 2005 as the baseline. It was expected that Hong Kong had to follow suit. Features, such as coverage, of the mandatory scheme could be fine tuned afterwards.	
001228 - 001455	Ir Dr C W TSO, Institution of Mechanical Engineers (Hong Kong Branch)	Expression of views (LC Paper No. CB(1) 1064/09-10(01))	
001456 - 001807	Mr Edwin LAU, Friends of the Earth (HK) (FOEHK)	Expression of views (LC Paper Nos. CB(1) 1064/09-10(02) and CB(1) 1120/09-10(01))	
001808 - 001952	Mr Prentice KOO, Greenpeace China (GC)	Expression of views (LC Paper No. CB(1) 1064/09-10(03))	
001953 - 002133	Ir Victor CHEUNG, Professional Green Building Council (PGBC)	Expression of views (LC Paper No. CB(1) 1064/09-10(04))	
002134 - 002327	Mr Michael LI, BBS, JP, The Federation of Hong Kong Hotel Owners (FHKHO)	Expression of views - (a) support for the Bill; (b) the Bill should not contain any provisions that might affect the licensing of hotels; (c) the threshold of 500 square metre (m ²) under the same series of works within 12 months for major retrofitting works might be too high, since it was not uncommon for hotels to carry out different types of retrofitting works for areas not less than 500 m ² at different time intervals; and (d) should provide necessary training for frontline officers to ensure consistency in the enforcement of the Bill.	
002328 - 002601	Ir K F YEE, Building Services Operation and Maintenance Executives Society	Expression of views (LC Paper No. CB(1) 1120/09-10(02))	

Time marker	Speaker	Subject(s)	Action required
002602 - 002859	Dr Sam HUI, ASHRAE Hong Kong Chapter (ASHRAE)	Expression of views - (a) support for the Bill; (b) BECs should be regularly updated to keep abreast of latest development in the international arena; (c) consideration should be given to setting up an energy labelling scheme for buildings to enhance public awareness on building energy efficiency; and (d) the lead time for energy audits should be shortened from once every 10 years to once every five to eight years, to take heed of technological advancement.	
002900 - 003038	Mr HO Pun-hing, The Hong Kong Federation of Electrical and Mechanical Contractors Ltd	Expression of views - (a) support for the Bill which was a step forward in improving building energy efficiency; and (b) membership of the appeal board should be extended to cover various professional bodies, not just confined to Hong Kong Institution of Engineers (HKIE).	
003039 - 003304	Mr Paul ZIMMERMAN, Civic Party (CP)	Expression of views (LC Paper No. CB(1) 1064/09-10(05))	
003305 - 003619	Mr M S KWAN, The Institution of Engineering and Technology Hong Kong	Expression of views (LC Paper No. CB(1) 1138/09-10(01))	
003620 - 003924	Prof Stephen LAU, The University of Hong Kong (HKU)	Expression of views (LC Paper No. CB(1) 1138/09-10(02))	
003925 - 004211	Mr Martin TAM, Federation of Hong Kong Industries	Expression of views (LC Paper No. CB(1) 1138/09-10(03))	
004212 - 004401	Ir Eric LAU, Hong Kong Association of Energy Engineers (HKAEE)	Expression of views (LC Paper No. CB(1) 1138/09-10(04))	

Time marker	Speaker	Subject(s)	Action required
004402 - 004702	Mr FUNG Kwai-kin, Hong Kong Electrical Contractors' Association Ltd	Expression of views (LC Paper No. CB(1) 1064/09-10(06))	
004703 - 004801	Mr John HERBERT, BEAM Society	Expression of views (LC Paper No. CB(1) 1064/09-10(07))	
004802 - 004816	Mr YIP Sai-wa, Lift and Escalator Contractors Association (LECA)	Support for the Bill with nothing further to add.	
004817 - 005032	Ir Victor LEUNG, The Chartered Institution of Building Services Engineers (Hong Kong Branch)	Expression of views - (a) support for the Bill which could help reduce energy consumption; and (b) given that increasing energy consumption was driven by the demand for better living quality, efforts should be made to meet such demand through the use of more energy efficient installations.	
005033 - 005218	Mr Michael LEUNG, Energy Institute (Hong Kong Branch)	Expression of views (LC Paper No. CB(1) 1138/09-10(05))	
005219 - 005409	Mr PAU Wai-keung, Asian Institute of Intelligent Buildings	Expression of views (LC Paper No. CB(1) 1138/09-10(06))	
005410 - 005636	Ir K Y WONG, Estates Offices/Facilities Management Offices of Universities	Expression of views (LC Paper No. CB(1) 1138/09-10(07))	
005637 - 005739	Mr Martin WAN, Hong Kong Hotels Association - Hotel Engineers Committee (HKHA-HEC)	Expression of views - (a) support for the Bill; and (b) should take into account the needs of the hotel trade to provide a safe and comfortable accommodation for customers.	
005740 - 010011	Mr CHUNG Tse-ming, CIE (Hong Kong) Ltd (CIEHK)	Expression of views - (a) support for the Bill; (b) clarification on the misconception that lighting installations consumed more energy than other building services installations;	

Time marker	Speaker	Subject(s)	Action required
		<p>(c) CIE had set a standard on lighting for indoor work places which had been subsequently adopted as ISO8995; and</p> <p>(d) BECs should be reviewed at a regular interval of three to five years to keep abreast of latest technological development.</p>	
010012 - 010156	Mr Dave CHAN, The Hong Kong Air Conditioning and Refrigeration Association Ltd (HKACRA)	Expression of views (LC Paper No. CB(1) 1138/09-10(08))	
010157 - 010500	Ir Dr F C CHAN/HKIE	Expression of views (LC Paper No. CB(1) 1064/09-10(08))	
010501 - 010726	Dr Eric CHAN, The Hong Kong Institute of Facility Management (HKIFM)	<p>Expression of views -</p> <p>(a) support for the Bill;</p> <p>(b) some older buildings, particularly those not properly managed, might have difficulty in complying with the Bill;</p> <p>(c) the threshold for major retrofitting works to include addition or replacement of a central building services installation was too high. The requirement for certification of these works would also create additional burden; and</p> <p>(d) inclusion of other professionals as registered energy assessors (REA) would ensure adequately supply to meet demand on the one hand and reduce the costs on the other.</p>	
010727 - 012254	Chairman Administration	<p>Administration's summary response to deputations' views -</p> <p>(a) it was intended that the codes of practices setting out in detail the technical standards of the mandatory schemes would be reviewed once every five years to allow sufficient time for the trades to get familiarized with the requirements. The trades had raised no objection to the proposed arrangements during consultation;</p>	

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		<p>(b) 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, in order to obtain the Certificates of Compliance Registration (COCR);</p> <p>(c) COCR was to be renewed once every 10 years. As renewal would incur cost, a shorter interval might create additional financial burden on building owners;</p> <p>(d) the Bill would not peg to the licensing of hotels;</p> <p>(e) the requirement for energy audit to be conducted once every 10 years was in line with some overseas jurisdictions;</p> <p>(f) the requirement to exhibit energy audit form at the main entrance of a building would enable prospective buyers and tenants to make an informed choice, which would in turn encourage the building owner(s) to improve the energy efficiency of the building;</p> <p>(g) the mandatory energy audit requirement would enable the collection of necessary information for building up relevant database of energy consumption of buildings, which was requisite for the setting up of a grading system for buildings in the long run;</p> <p>(h) eligible building owners could apply for subsidy under the \$450 million Building Energy Efficiency Funding Schemes to enhance energy efficiency of their buildings;</p> <p>(i) adequate training would be provided to equip frontline staff to enforce the Bill;</p> <p>(j) there would be adequate supply of REA given that some 2 000 professionals were currently eligible for registration as REA. Guidelines would also be prepared for REA; and</p>	

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		(k) a member of the Buildings Energy Efficiency Appeal Board Panel must have practiced in the engineering profession in Hong Kong for at least 10 years.	
012255 - 013539	<p>Ms Cyd HO Prof Stephen LAU/HKU Dr Eric CHAN/HKIFM Chairman Administration Ir Dr F C CHAN/HKIE Mr Dave CHAN/HKACRA</p>	<p>Ms Cyd HO's enquiry on the feasibility of having two separate types of RAE for residential and commercial buildings.</p> <p>Prof Stephen LAU's view that reference could be made to the Leadership in Energy and Environmental Design (LEED) Green Building Rating System under which individuals who had passed the accreditation examination could rate buildings according to various LEED systems. This could enlarge the pool of professionals to promote green buildings.</p> <p>Ir Dr F C CHAN's view that apart from complexity of works, there was also safety consideration. Hence, only those relevant professionals should be qualified for RAE.</p> <p>Administration's response that given the complexity of the four types of building services installations, the Bill had specified that the declarations and energy audit forms had to be certified and completed by RAE who met the prescribed qualification requirements.</p> <p>Ms Cyd HO and Dr Eric CHAN concerns about compliance with the control regime by owners of older and smaller developments.</p> <p>Administration's response -</p> <p>(a) non-governmental organizations could apply funding under the Environment and Conservation Fund to assist individual building owners to carry out small-scale energy-efficient projects to comply with the Bill; and</p> <p>(b) owners could also apply for an exemption for any building services installation in the building from any provision of the specified standards and requirements if it was, for heritage conservation or technical or operational reasons, undesirable or impracticable for the installation to comply with the provision.</p>	

Time marker	Speaker	Subject(s)	Action required
013540 - 014909	<p>Prof Patrick LAU Chairman Administration Dr Sam HUI/ASHRAE Mr Edwin LAU/FOEHK</p>	<p>Prof Patrick LAU's enquiries -</p> <ul style="list-style-type: none"> (a) the number of existing buildings which were in compliance with the Bill; and (b) rationale for not including residential units in the Bill. <p>Administration's response -</p> <ul style="list-style-type: none"> (a) only some 1 000 of around 45 000 existing buildings in Hong Kong had participated in the voluntary Hong Kong Energy Efficiency Registration Scheme for Buildings (HKEERSB) since its introduction in 1998; and (b) Major domestic appliances including room air conditioners, refrigerating appliances, compact fluorescent lamps as well as washing machines and dehumidifiers were/would be subject to energy labelling requirement under the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598). The appliances subject to the mandatory energy efficiency labelling requirement had covered around 70% of the electricity consumption in the residential sector. <p>Prof Patrick LAU, Dr Sam Hui and Mr Edwin LAU's views -</p> <ul style="list-style-type: none"> (a) publicity should be stepped up to promote public awareness on building energy efficiency and energy audits; and (b) building owners should be required to comply with the building grading system after its introduction. <p>Administration's response that the Electrical and Mechanical Services Department (EMSD) had put in place websites on promoting energy efficiency and conservation. Outreaching teams had also been deployed to visit schools to promote energy efficiency.</p>	
014910 - 015739	<p>Chairman Mr CHUNG Tse-ming/ CIEHK Mr Prentice KOO/GC</p>	<p>Chairman's view and enquiry -</p> <ul style="list-style-type: none"> (a) need to regulate external lighting of buildings; and 	

Time marker	Speaker	Subject(s)	Action required
	Ir Victor CHEUNG/ PGBC Mr Colin CHUNG/ ACEHK Mr Paul ZIMMERMAN/CP Mr Edwin LAU/FOEHK	<p>(b) whether other parts of residential buildings, such as central air-conditioning system, should be included in the Bill.</p> <p>Mr CHUNG Tse-ming and Ir Victor CHEUNG's views that the scope of the Bill in respect of lighting installations was in line with the voluntary HKEERSB and overseas jurisdictions which did not regulate external lightings, particularly display lighting. Consideration could be given to extending regulation to external lightings after completion of the consultancy study which was still underway. Mr Edwin LAU's view that external lighting of buildings should be regulated.</p> <p>Mr Colin CHUNG's view that residential units should not be regulated since it would be inappropriate for EMSD to enter residential dwellings to enforce the Bill. Mr Prentice KOO, Mr Paul ZIMMERMAN and Mr Edwin LAU's view that central air-conditioning system of residential buildings should be included in the Bill.</p>	
015740 - 020425	Ms Cyd HO Mr Michael LI/FHKHO Mr Martin WAN/ HKHA-HEC	<p>Ms Cyd HO's enquiry on the impact on hotels if the threshold for major retrofitting works was reduced from 500m² to 200 m².</p> <p>Mr Michael LI's view that there were various retrofitting works to be carried out in a hotel throughout a year, and that it was not viable to split these works into different contracts. The operation of a hotel would be seriously affected if the threshold was reduced to 200 m².</p> <p>Mr Martin WAN's explanation that as hotels operated round-the-clock, retrofitting works had to be carried out in phases. Hotel operators might have to obtain FOC frequently if the threshold was adjusted downward.</p>	
020426 - 020450	Chairman	Next meeting would be held on 26 February 2010.	