



Professional Green Building Council



WWF for a living planet®

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Hon Audrey EU Yuet-mee, SC, JP  
Chairman  
Bills Committee on Buildings Energy Efficiency Bill  
The Legislative Council  
c/o The Legislative Council Secretariat  
3rd floor, Citibank Tower  
3 Garden Road  
Hong Kong

By Email & By Post  
Email : [pi@legco.gov.hk](mailto:pi@legco.gov.hk)

Dear Ms Eu

**Bills Committee on Buildings Energy Efficiency Bill Meeting on 9 February 2010**

In response to the invitation for submissions from the Bills Committee on Buildings Energy Efficiency Bill, we are pleased to jointly submit a written paper supporting the proposed mandatory implementation of the Building Energy Codes. Please find enclosed paper for your consideration and record.

For your information, PGBC and WWF Hong Kong have registered to send representatives to present on the subject separately at the captioned meeting.

Yours sincerely

K S Wong  
Chairman  
Professional Green Building Council

William Yu (Dr)  
Head of Climate Program  
WWF-Hong Kong

Encl

c.c. Prof Hon Patrick Lau, SBS, JP, Legislative Councillor (Architectural, Surveying & Planning)  
Mr Bernard Charnwut Chan, GBS, JP, Chairman, Council for Sustainable Development  
Ir Dr Andrew Chan, Chairman, Hong Kong Green Building Council, and President, HKIE  
Ms Anna S Y Kwong, MH, President, HKIA  
Mr Evans Lu, President, HKILA  
Mr P Y Tam, President, HKIP  
Prof Chau Kwong Wing, President, HKIS



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## Submission to Bills Committee on Buildings Energy Efficiency Bill

The Professional Green Building Council (PGBC) and WWF-Hong Kong strongly support the proposed mandatory implementation of the Building Energy Codes (BECs). To ensure the proposed legislation achieves the stipulated objectives, the following areas should be properly addressed and the Administration should provide the necessary assistance:

### 1) Overview - Building Energy Efficiency bill

The building sector is the Hong Kong's largest electricity consumer accounting for 89% of the total consumption. Improvement in energy efficiency is critical to making a contribution in mitigation with an effort of combating climate change. In supplementing the BECs, based on survey of both new and existing building stock at different ages, the government should set up a carbon / energy reduction target for the building sector. The percentage of energy saving will enable the estimation of the number of new and existing buildings that require compliance with the new legislation and retrofitting.

### 2) Review of Energy Efficiency Standards

Based on the government's initial estimation, the bill will result in saving energy for 2.8 billion kilowatt hours in the first decade of implementation, which contributes to a reduction in carbon dioxide emissions of 1.96 million tonnes. However, the energy saving is not very significant as it only accounts for less than 1% of electricity consumed by buildings in Hong Kong<sup>1</sup> and given the resources and effort spent for the enforcement of the bill.

We support the implementation of the mandatory BECs, which serves as the minimum standards in achieving energy saving in building sector. In order to upgrade the standards with an aim to make continuous improvement, the standards of BECs as well as the percentage of improvement should be reviewed every three years. Generally speaking, the percentage of overall saving resulted from implementation should be uplifted by 10% every three years. The percentage of improvement can be reviewed every six years.

### 3) Assistance to Existing Building Owners

Apart from making the new building owners to comply with the requirements, PGBC and WWF consider that the Administration should provide the necessary assistance to existing building owners to improve the energy efficiency. With the successful implementation of the HK\$450 million Buildings Energy Efficiency Funding Scheme, the government should consider making it a supplementary scheme to BECs to cover the place with total floor area less than 500 m<sup>2</sup> under the same series of works within 12 months in a unit or a common area of a prescribed building.

For future development, the government should consider requiring all the new building owners to perform energy and carbon audit every year to establish a benchmark for Hong Kong building sector as well as monitoring energy improvement measures.

### 4) BECs for Old Industrial Buildings

In the latest Policy Address, the government has proposed a package of measures to release the potential of over 1,000 old industrial buildings. In achieving the goal of the redevelopment or conversion of industrial buildings by owners, the government should not miss the golden opportunity to promote energy efficiency in this huge stock of buildings.

The government should require the building owners to adopt BECs when redeveloping or converting the old industrial buildings. This may be done by administrative measures before passing the building energy efficiency bill.

### 5) Energy efficiency in non-common areas

According to the bill, owners of pre-enactment buildings are required to improve energy efficiency only when the buildings undergo a major retrofitting work of a place with total floor area of not less than 500 m<sup>2</sup> under the same series of works within 12 months in a unit or a common area of a prescribed building or addition or replacement of a main component of a central building services installation. The requirements of the floor area should be reviewed in order to cover more buildings.

The bill covers only the common area of a building at this stage. To enhance the effect, the non-common area should be covered in the next stage of legislation. PGBC and WWF urge the government to set an example to apply the standards of BECs (or above the standards) to all the government office spaces, including those rental areas in the private-sector. The initiative should be extended from the public sector to the private sector in the next stage.

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WWF-Hong Kong  
February 2010

<sup>1</sup> HK's electricity consumption is approximately 40 billion kilowatt hours a year, of which 89% is for buildings. With 280 million kWh energy saving achieved by the BECs, the percentage of saving is 0.7% of total electricity consumption in building sector, i.e., 280 million kWh / 36 billion kWh.