

Construction Industry Council

Way Forward on Promotion of Green Buildings

(I) Purpose

- This paper sets out the recommendations of the Committee on Environment and Technology (Com E&T) on the way forward for promoting green buildings in Hong Kong.

(II) Industry-wide Initiatives on Green Buildings

- The industry is pursuing the several initiatives on green buildings in line with recommendations made in the report of the CIRC.
- *Recommendation 91 - Development of resources for life cycle costing*
 - Software tools for assessing the life cycle cost, environmental impact, waste generation and energy consumption of building construction have been developed under a consultancy commissioned by EMSD in April 2003.

- The tools have been made available free of charge to the industry since mid-2005 to facilitate development of cost effective, environmentally friendly, and energy efficient designs. EMSD is collaborating with Arch SD to apply the tool to four new projects at design stage.

- *Recommendation 93 - Promotion of green features in private buildings through exemption of areas required for such features from floor area calculations*

BD, Lands D and Plan D issued the first Joint Practice Note (JPN1) in 2001 to provide incentives for encouraging the provision of green features in new buildings and the adoption of green construction methods. A second Joint Practice Note (JPN2) to encourage the provision of more green features was subsequently issued in February 2002.

- *Recommendation 105 - Building environmental performance assessment schemes*
 - The Comprehensive Environmental Performance Assessment Scheme (CEPAS) was developed under a consultancy commissioned by BD. The Application Guidelines, Assessment Manuals and implementation proposal for CEPAS were submitted to PCICB in July 2005 for discussions on the way forward.

- Having compared CEPAS with an existing assessment scheme, Hong Kong Building Environmental Assessment Method (BEAM), PCICB decided to adopt BEAM as the integrated assessment model for the local construction industry subject to various improvements including-
 - enhancing the administration framework of BEAM
 - opening up qualification of BEAM assessors
 - incorporation of the desirable features of CEPAS into BEAM.
- The implementation of these improvements is being monitored by CIC.

(III) Problems and Issues

- Com E&T was briefed by the HK-BEAM Society on the progress made in implementing the agreed improvements to BEAM at the 2nd meeting of the Committee held on 28 June 2007. The Professional Green Building Council (PGBC) then briefed Members on its objectives and current initiatives on green buildings at the 3rd meeting held on 30 August 2007.
- The Committee notes that there is no focused forum for promoting green buildings in Hong Kong. The scope of the HK-BEAM Society is limited to promoting HK-BEAM as an assessment method while the activities of PGBC are mainly on networking with overseas organizations and organizing seminars or similar functions for raising the awareness of green buildings. It is also apparent that the effectiveness of both PGBC and HK-BEAM Society is affected by the lack of resources.

(IV) Experience of Other Economies

- In other leading economies, green buildings are promoted through coherent institutional arrangements. For example, in United States, the Green Building Council (USGBC) encompassing all sectors of the building industry, is the focal point.
- USGBC publishes a Sustainable Building Technical Manual for providing detailed guidelines on design, construction and operation of green building.
- This is complemented by promotion of Leadership in Energy and Environmental Design (LEED) as the assessment method for benchmarking environmental performance.

- USGBC operates the LEED Professional Accreditation programme to build up an adequate supply of building professional conversant with green building design principles and LEED certification process.
- Some state governments contribute through policy initiatives. For example, New York, Maryland and Oregon offer tax credits for LEED certified buildings. Seattle has legislated to require LEED certification for publicly funded building projects.

(V) Way Forward

(A) Analysis

- The former PCICB had decided to adopt BEAM as the integrated building environmental performance assessment scheme of the industry subject to various improvement to BEAM which are being taken forward by HK-BEAM Society.
- Reference to the USGBC model shows that assessment method is only part of the essential ingredients for promoting green buildings.
- The other essential ingredients include a focused forum for promotion of promoting green buildings, industry wide strategy for the initiative and comprehensive guidelines for the design, construction and operation. These are not available in Hong Kong.

(B) Focused forum

- For the long-term, Com E&T proposes to establish a focused forum that will serve to poll together the industry-wide efforts in developing green buildings through-
 - formulating industry-wide strategy for promotion of green buildings
 - securing industry and government support for the strategy
 - formulating guidelines for the design, construction and operation of green buildings

- nurturing a pool of professionals conversant with green building design principles and building environmental performance assessment
- conducting and funding research and development
- co-ordinating the efforts of organizations involved in green building initiatives
- providing funding for such organizations where appropriate
- education and promotion.

- The following are the possible specific initiatives that can be pursued by the focused forum -
 - technical manual for providing detailed guidelines on design, construction and operation of green building
 - securing acceptance of the guidelines as standards for green buildings by Government, green groups and the community as a whole
 - promoting assessment of key aspects of environmental performance such as air ventilation assessment for buildings
 - advocating linkage between financial incentives for provision of green features to improvements in environmental performance determined through appropriate assessments
 - overseeing the adoption and development of HK-BEAM

(C) Options for focused forum

- There are two possible options for the focused forum -
 - Option 1 - establishing it as a task force under the Committee on Environment and Technology
 - Option 2 - establishing it as an independent entity wholly owned by CIC.
- While Option 1 can be readily implemented, a task force will cover only a relatively short duration. On the other hand the independent entity in Option 2 can better sustain the promotion efforts. Its separate identify may develop into an icon for promoting sustainability in building developments thus helping to securing wider industry and community support.

(D) Funding

- Given the high priority accorded by the community to sustainability, the operation of the focused forum should be funded by CIC using industry levy and its operation should be supported by CIC staff.
- CIC should back up the focused forum in seeking other sources of funding such as the Sustainable Development Fund administered by the Council for Sustainable Development.
- Subject to the drawing up of a business plan, the ballpark figure for the annual budget of the focused forum is about \$5 million which will cover development of guidelines, sponsoring research and development as well as education and promotion activities.

(E) Relation with other organizations

- The focused forum will not duplicate the efforts of other organizations engaged in green buildings but will co-ordinate and fund their work where appropriate.
- In particular, the proposal will not affect the status of BEAM as the integrated assessment scheme for the industry. The HK-BEAM Society will continue to own, develop and operate HK-BEAM.
- The focused forum will dovetail BEAM with the overall strategy for promoting green buildings including promoting its wider adoption by the industry.

(VI) Advice Sought

- Members are requested to express their views on -
 - the establishment of a focused forum under CIC for promotion of green buildings
 - whether the focused forum should be an independent entity wholly own by CIC
 - the proposed functions for the focused forum
 - the proposed budget for these functions.

ADVICE PLEASE