Buildings Energy Efficiency Bill Views from The Institution of Mechanical Engineers Hong Kong Branch

In response to the invitation of the Bill Committee, the Hong Kong Branch of The Institution of Mechanical Engineers (IMechE HKB) is pleased to give below its views on the Building Energy Efficiency Bill for consideration and discussion at the Bill Committee Meeting on 9 February 2010.

General

- 1. IMechE HKB shares the community's aspiration for quality environment and particularly clean and fresh air which is vital to the health of people. It is pleasing to see that the Government is actively promoting public awareness that that there is a strong link between energy consumption and emission of pollutants and greenhouse gases, and hence a pressing need to strive for energy conservation and energy efficiency.
- 2. Similar to the situations in other service-based developed economies, it is noted from published data that commercial buildings and commercial parts of residential and industrial buildings in Hong Kong account for substantial portion of total energy consumptions. IMechE HKB concurs that as building energy efficiency is an area where significant energy savings can be made, mandatory requirement of buildings to comply with minimum energy efficiency standards is necessary to bring Hong Kong in line with global trend and international practice.
- 3. IMechE HKB welcomes the introduction of Building Energy Efficiency Bill and considers the Bill in its present form is an initial but important step to achieve building energy conservation and efficiency. It is believed that the implementation of the proposed mandatory compliance with the Code of Practice for Energy Efficiency of Building Services Installations in Buildings (BEC) will help Hong Kong in its pursuit of good air quality, low carbon economy and sustainable development.

Coverage, Control Regime and Energy Audit

- 4. Regarding the proposed categories of buildings that require Certificate of Compliance Registration and Form of Compliance (Schedule 1), it is suggested to consider the inclusion of passenger building of the planned ocean going passenger liner terminal. Furthermore, IMechE HKB is of the view that the category of industrial building shall in future have its coverage be extended to the entire building, not just confined to its common area.
- 5. The proposed adoption of different control regimes on buildings, viz. Post-enactment Buildings and Pre-enactment Buildings, and the responsibilities of different parties in the aforesaid Buildings to comply with BEC and to obtain Certificate of Compliance Registration/Form of Compliance as outlined in Annex B of the Bill is supported.

- 6. IMechE HKB is of the view that the validity of Certificate of Compliance Registration (Section 10(4)) should be shortened to 5 years from the proposed 10 years. This is to facilitate effective monitoring such that the required standards of the building services installations in the building are maintained by the owners can be ascertained at all times.
- 7. It is noted that the coverage of categories of buildings for energy audit is confined to the common area of the commercial building and commercial portion of composite buildings (Schedule 4). IMechE HKB is of the view that this should in future be extended to cover the common areas of all categories of buildings stated in Schedule 1. Nevertheless, the proposed energy audit interval of no longer than 10 years is considered too long (Section 22(1)). It is desirable to have it shortened to once every 5 years to ensure the standards of the building services installations in the building are maintained.

Code of Practice and Certificate of Compliance Registration/Form of Compliance

- 8. It is important that the requirements to be stipulated in the Code of Practice for Energy Efficiency of Building Services Installations in Buildings (BEC) should take due consideration of the local needs, circumstances and built environment and incorporated good engineering practice. The views of building industry, professional institutes, trade associations and academia should be sought. Given the fast changing needs of the community and rapid advent of technology, it is desirable to conduct review of BEC and the interval of such review should be no longer than 5 years.
- 9. Similarly, the requirements to be stipulated in the Code of Practice for Energy Audit in Buildings (EAC) should take due consideration of the local needs, circumstances and built environment and incorporated good engineering practice. The views of building industry, professional institutes, trade associations and academia should be sought. Given the fast changing needs of the community as well as the advancement of technology, it is desirable to conduct review of EAC and the interval of such review should be no longer than 5 years.
- 10. The contents of both Certificate of Compliance Registration for new buildings, Form of Compliance for major works and Energy Audit Form should be so designed such that they are tally with the intent of the relevant Code of Practice, and are easily understood by the building owner and general public.

Registered Energy Assessors

11. IMechE HKB supports that energy efficiency certification work and energy audit work must be carried out by Registered Energy Assessors. In setting out the criteria (academic/professional qualifications and experience) for registration as a Registered Energy Assessor, consideration should be given to the nature and complexity of work, the level of responsibilities and availability of persons in possession of such criteria.

12. To ascertain consistence in terms of process, procedure and standards in the course of carrying out certification/audit works, it is desirable to have appropriate Guidelines drawn up and made available to the Registered Energy Assessors for execution.

Concluding Remarks

- 13. IMechE HKB fully supports the enactment of the proposed Building Energy Efficiency Bill and considers that the Bill in its present form is a first but important step to help Hong Kong in its pursuit of reducing energy intensity, achieving low carbon economy and combating climate change.
- 14. In order to bring Hong Kong on a par with other forward thinking developed economies, to the coverage of buildings subject to BEC and EAC should be further extended. Furthermore, the energy efficiency standards of building services installations should be progressively uplifted in future review of BEC and EAC to reflect public opinion and advent in technology. IMechE HKB is pleased to participate in and offer professional input to such review.
- 15. Government should continue stepping up public engagement to further promote the awareness of the community the environmental and economic benefits of lifting energy efficiency of the building services installations in buildings.

For and on behalf of IMechE Hong Kong Branch

Ir Dr C W Tso

Immediate Past Chairman

1 February 2010