

## LCQ22: Facilitating the achievement of carbon neutrality in existing buildings

Following is a question by the Hon Lam So-wai and a written reply by the Secretary for the Environment, Mr Wong Kam-sing, in the Legislative Council today (April 6):

Question:

Last year, the Environment Bureau announced Hong Kong's Climate Action Plan 2050, setting a target for Hong Kong to achieve carbon neutrality before 2050. According to an estimate by a non-profit-making organisation, for the majority of some 42 000 existing buildings in Hong Kong, assessments relating to green buildings have not been conducted nor has information relating to energy saving and emission reduction been prepared. On facilitating the achievement of carbon neutrality in existing buildings, will the Government inform this Council:

(1) whether it has plans to assist the minority owners or property management companies of existing buildings in conducting assessments relating to green buildings or preparing information relating to energy saving and emission reduction, so that members of the public can understand the progress of achieving carbon neutrality in various existing buildings; if so, of the details; if not, the reasons for that;

(2) whether it has provided appropriate support for the minority owners or property management companies of existing buildings to assist them in carrying out building energy saving improvement works, thereby enhancing the energy efficiency of the buildings and expediting the achievement of carbon neutrality in such buildings; if so, of the details; if not, the reasons for that; and

(3) whether it will set up a one-stop platform to facilitate the minority owners and property management companies of existing buildings to engage contractors, through simple tender procedures, for carrying out building energy saving improvement works and preparing information relating to energy saving and emission reduction; if so, of the details; if not, the reasons for that?

Reply:

President,

In October 2021, the Government announced Hong Kong's Climate Action Plan 2050 outlining the four major decarbonisation strategies, namely "net-zero electricity generation", "energy saving and green buildings", "green transport" and "waste reduction", that would lead Hong Kong towards the goal

of carbon neutrality before 2050.

My consolidated reply to the Hon Lam So-wai's question is as follows:

Considering that buildings account for about 90 per cent of the electricity consumption in Hong Kong at present, promoting "energy saving and green buildings" can reduce power consumption and the demand for power generation, and lessen the financial burden on the public due to the increased use of clean fuels for electricity generation. The Government's goal is to reduce the electricity consumption of commercial buildings by 30 per cent to 40 per cent and that of residential buildings by 20 per cent to 30 per cent from the 2015 level by 2050; and to achieve half of the above targets by 2035. To this end, we need to adopt a multi-pronged approach in planning for energy conservation.

The Government continues to improve energy efficiency standards of building services installations in both new and existing buildings, and explores the possibility of expanding the scope of regulation. To enhance the overall building energy efficiency performance in Hong Kong, the Government fully implemented in 2012 the Buildings Energy Efficiency Ordinance (BEE0), which mandates compliance with the minimum energy efficiency standards for major building services installations of new buildings, as well as existing buildings which undergo major retrofitting works. Pursuant to the BEE0, the Government gazetted on December 31, 2021 the 2021 edition of the Building Energy Code (BEC), uplifting the energy efficiency standards with an overall improvement of more than 15 per cent in energy saving as compared with the 2015 edition. By 2035, it is estimated that the BEC would bring about an annual energy saving of around 4.7 billion to 5.3 billion kWh from buildings in Hong Kong (compared with 2015).

Outside the legal framework, we encourage the trades to raise energy saving performance to a new level beyond the statutory requirements. A building, be it new or existing, can apply for the Energy Efficiency Registration Scheme for Buildings provided that its energy performance exceeds the minimum statutory requirements and is certified under the BEAM Plus of the Hong Kong Green Building Council. The capital expenditure on qualified environmental installations is eligible for tax concession.

Separately, we will consider conducting energy audits more frequently and mandating the implementation of identified energy management opportunities, and strengthen the promotion of retro-commissioning (RCx).

Apart from building services installations, it is equally important to improve the energy efficiency of appliances. Under the Mandatory Energy Efficiency Labelling Scheme (MEELS), energy labels are required to be shown on the prescribed products for supply in Hong Kong to inform consumers of their energy efficiency performances. MEELS currently covers eight types of electrical products, accounting for about 50 per cent of the total energy consumption in the residential sector and saving about 930 million kWh of electricity each year. We keep reviewing MEELS and our latest proposal is to expand its scope to include three types of products, namely light emitting diode (LED) lamps, gas cookers and gas instantaneous water heaters. Around

568.8 terajoules of energy (i.e. about 160 million kWh of electricity) can be saved each year. By then, household appliances covered by MEELS will leap to account for about 80 per cent of the total energy consumption in the residential sector. With gradual improvement in energy efficiency of products available in the market, building users can help enhance the overall energy performance of their buildings when replacing existing appliances.

As to the progress of participation by owners or property management companies in decarbonising existing buildings via enhancing energy conservation, under the current Scheme of Control Agreements, the two power companies have established energy efficiency funds to provide subsidies of up to \$500,000 on a matching basis for energy-saving improvement works in various types of buildings, including replacement of air-conditioning and lighting, RCx projects and installation of smart equipment. As at end-2021, the two power companies received nearly 1 900 applications. Eighty per cent of the applications (i.e. over 1 500 applications) have been approved to subsidise energy-saving improvement works in over 2 500 existing buildings. Apart from the above, the Urban Renewal Authority (URA) seeks to drive timely maintenance of buildings in addition to planning urban renewal in old districts. URA provides assistance for owners in need, with a view to building a favourable living environment with and for the public. Residential building owners, when seeking financial support from the URA in rehabilitating their buildings, can also utilise the funding to install equipment with better energy efficiency performance. The details are set out in URA's website ([www.brplatform.org.hk/en/subsidy-and-assistance](http://www.brplatform.org.hk/en/subsidy-and-assistance)).

From a macro perspective, to mobilise the community to take collective actions to conserve energy, we need to enhance the transparency of data and benchmarks. We plan to, through releasing energy data and introducing energy benchmarking tools, facilitate the comparison of building energy consumption performance and establish a two-way partnership in carbon reduction. Moreover, to encourage members of the community to practise low-carbon living in line with the spirit of energy saving, the Government has put in place the one-stop Energy Saving for All website ([www.energysaving.gov.hk](http://www.energysaving.gov.hk)) to provide diverse and practical information on energy saving for members of the public. We will continue to regularly update the website, including various energy saving tips in daily lives.