政府總部 環境局 香港添馬添美道二號 政府總部東翼十六樓



ENVIRONMENT BUREAU GOVERNMENT SECRETARIAT

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3 August 2015

Chief Council Secretary
Legislative Council
Legislative Council Complex,
1 Legislative Council Road,
Central, Hong Kong
(Attn.: Mr. Derek LO)

Dear Mr. LO,

Finance Committee Meeting on 14 July 2015: District Cooling System at the Kai Tak Development

I refer to your email of 15 July 2015, and would like to provide additional information as requested by Hon. WONG Yuk-man at the captioned meeting.

As mentioned in our discussion and information papers submitted to the Legislative Council concerning the District Cooling System (DCS) at the Kai Tak development (KTD), the DCS is an energy-efficient air-conditioning system as it consumes 35% and 20% less electricity as compared with traditional air-cooled air-conditioning systems and individual water-cooled air-conditioning systems using cooling towers respectively. Due to better energy efficiency, the maximum annual saving in electricity consumption upon completion of the entire DCS project is estimated to be 85 million kilowatt-hour, with a corresponding reduction of 59 500 tonnes of carbon dioxide emission per annum.

In view of its significant environmental benefits, this technology has been widely adopted in other parts of the world – as at early 2015, more than 150 DCSes have been constructed in Europe, North America and Asia.

The countries which have implemented DCSes include Singapore (e.g. DCS at the Marina Bay New Business District, with a cooling capacity of 323 megawatt (MW)); Japan (e.g. DCS at Tokyo's Sinjuku, with a cooling capacity of 208 MW); Middle East (e.g. DCS at Al Maryah Island in Abu Dhabi, with a cooling capacity of 281 MW); Europe (e.g. DCS at La Defense, Paris with a cooling capacity of 243 MW) and the United States (e.g. DCS at Boston, with a cooling capacity of 366 MW). A tariff structure similar to that for the DCS at KTD has been adopted for many of the overseas DCSes, under which the capital cost and operation and maintenance fees are collected from users. According to the available information at hand, the overseas DCSes have largely been financially sustainable.

Yours sincerely,

Sheena

(Miss Sheena YAP) for the Secretary for the Environment

c.c.

Ms. Emily TSANG, Treasury Offr (L&P) - 2147 5239 (Fax no.)