

立法會
Legislative Council

LC Paper No. FC50/15-16

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Ref : FC/1/1(1)

Finance Committee of the Legislative Council

**Minutes of the 62nd meeting
held at Conference Room 1 of the Legislative Council Complex
on Tuesday, 14 July 2015, at 9:00 am**

Members present:

Hon Tommy CHEUNG Yu-yan, GBS, JP (Chairman)

Hon CHAN Kin-por, BBS, JP (Deputy Chairman)

Hon Albert HO Chun-yan

Hon James TO Kun-sun

Hon CHAN Kam-lam, SBS, JP

Hon LEUNG Yiu-chung

Hon Emily LAU Wai-hing, JP

Hon TAM Yiu-chung, GBS, JP

Hon Abraham SHEK Lai-him, GBS, JP

Hon WONG Kwok-hing, BBS, MH

Hon Jeffrey LAM Kin-fung, GBS, JP

Hon WONG Ting-kwong, SBS, JP

Hon Cyd HO Sau-lan, JP

Hon Starry LEE Wai-king, JP

Hon CHAN Hak-kan, JP

Dr Hon Priscilla LEUNG Mei-fun, SBS, JP

Hon WONG Kwok-kin, SBS

Hon IP Kwok-him, GBS, JP

Hon Paul TSE Wai-chun, JP

Hon Alan LEONG Kah-kit, SC

Hon LEUNG Kwok-hung

Hon Albert CHAN Wai-yip

Hon WONG Yuk-man

Hon Claudia MO

Hon NG Leung-sing, SBS, JP
Hon Steven HO Chun-yin, BBS
Hon Frankie YICK Chi-ming, JP
Hon WU Chi-wai, MH
Hon YIU Si-wing, BBS
Hon MA Fung-kwok, SBS, JP
Hon Charles Peter MOK, JP
Hon CHAN Chi-chuen
Dr Hon Kenneth CHAN Ka-lok
Hon Alice MAK Mei-kuen, BBS, JP
Hon Christopher CHEUNG Wah-fung, SBS, JP
Hon SIN Chung-kai, SBS, JP
Hon IP Kin-yuen
Dr Hon Elizabeth QUAT, JP
Hon Martin LIAO Cheung-kong, SBS, JP
Hon POON Siu-ping, BBS, MH
Hon TANG Ka-piu, JP
Dr Hon CHIANG Lai-wan, JP
Ir Dr Hon LO Wai-kwok, SBS, MH, JP
Hon Christopher CHUNG Shu-kun, BBS, MH, JP
Hon Tony TSE Wai-chuen, BBS

Members absent:

Hon LEE Cheuk-yan
Dr Hon LAU Wong-fat, GBM, GBS, JP
Hon Frederick FUNG Kin-kee, SBS, JP
Hon Vincent FANG Kang, SBS, JP
Prof Hon Joseph LEE Kok-long, SBS, JP, PhD, RN
Hon Andrew LEUNG Kwan-yuen, GBS, JP
Hon Ronny TONG Ka-wah, SC
Dr Hon LAM Tai-fai, SBS, JP
Dr Hon LEUNG Ka-lau
Hon CHEUNG Kwok-che
Hon Mrs Regina IP LAU Suk-yee, GBS, JP
Hon Michael TIEN Puk-sun, BBS, JP
Hon James TIEN Pei-chun, GBS, JP
Hon Gary FAN Kwok-wai
Hon CHAN Han-pan, JP
Hon CHAN Yuen-han, SBS, JP
Hon LEUNG Che-cheung, BBS, MH, JP

Hon Kenneth LEUNG
Dr Hon KWOK Ka-ki
Hon KWOK Wai-keung
Hon Dennis KWOK
Dr Hon Fernando CHEUNG Chiu-hung
Dr Hon Helena WONG Pik-wan
Hon CHUNG Kwok-pan

Public officers attending:

Ms Elizabeth TSE Man-ye, JP	Permanent Secretary for Financial Services and the Treasury (Treasury)
Ms Esther LEUNG, JP	Deputy Secretary for Financial Services and the Treasury (Treasury) ¹
Mr Alfred ZHI Jian-hong	Principal Executive Officer (General), Financial Services and the Treasury Bureau (The Treasury Branch)
Mr Vincent LIU Ming-kwong, JP	Deputy Secretary for the Environment
Miss Sheena YAP Kah-yan	Assistant Secretary for the Environment (Energy) ²
Mr LAI Hon-chung, JP	Assistant Director of Electrical and Mechanical Services (Electricity and Energy Efficiency)
Mr LO Siu-kuen	Acting Chief Engineer (Energy Efficiency) B, Electrical and Mechanical Services Department

Clerk in attendance:

Ms Anita SIT	Assistant Secretary General 1
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Staff in attendance:

Mr Derek LO	Chief Council Secretary (1) ⁵
Mr Daniel SIN	Senior Council Secretary (1) ⁷
Mr Raymond SZETO	Council Secretary (1) ⁵
Mr Frankie WOO	Senior Legislative Assistant (1) ³

Ms Michelle NIEN
Miss Yannes HO

Legislative Assistant (1)5
Legislative Assistant (1)6

Action Dr Hon Kenneth CHAN Ka-lok's letter

The Chairman said that Dr Kenneth CHAN had submitted a letter requesting that Mr Nicholas W. YANG, Advisor to the Chief Executive on Innovation and Technology and non-official Member of the Executive Council, be invited to attend the meetings of the Committee for the deliberation of the proposals related to the setting up of the Innovation and Technology Bureau ("ITB"). The Chairman said that he had directed the matter to be considered by the Committee by circulation of paper FC220/14-15 issued on 10 July 2015 in accordance with paragraph 25 of the Finance Committee ("FC") Procedure. As some members had signified disapproval to Dr Kenneth CHAN's suggestion, and one member had requested for discussion of the matter at a meeting, the Chairman said that the Committee was not deemed to have approved Dr CHAN's suggestion. The Chairman further directed that Dr CHAN's request would be discussed when the Committee reached the agenda items related to the setting up of ITB.

2. Dr Kenneth CHAN said that it was necessary for the Committee to take an early decision and allow time for making arrangements for Mr YANG to attend the Committee's relevant meetings.

3. The Chairman said that he understood it was members' consensus that the Committee should focus on the funding items related to improving people's livelihood as a matter of priority. He asked Dr CHAN not to backtrack and digress at this stage. He would deal with Dr CHAN's request when the Committee was about to discuss the items related to the establishment of ITB.

Item No. 1 – FCR(2015-16)29
RECOMMENDATIONS OF THE
PUBLIC WORKS SUBCOMMITTEE MADE
ON 16, 24 AND 30 JUNE 2015

4. The Chairman advised that the item FCR(2015-16)29 sought the Committee's approval of the recommendations of the Public Works Subcommittee ("PWSC") made at its meetings held on 16, 24 and 30 June 2015. At present, the FC had approved 14 of the recommended items, including five items voted on separately. This Committee would continue to consider the

remaining six items which were to be voted separately on as per members' request.

5. The Chairman advised that the item PWSC(2015-16)29 invited the Committee to approve to increase the approved project estimate ("APE") of 45CG "District Cooling System at the Kai Tak development" by \$606.1 million from \$3,145.9 million to \$3,752 million in money-of-the-day prices for implementing Phase III (Package B) ("Phase IIIB") of the District Cooling System ("DCS") at the Kai Tak development ("KTD").

6. Dr LO Wai-kwok said that the particulars and justifications for constructing DCS, including its benefits as well as the mechanism for determining tariff charges, had been extensively discussed at different forums. He expressed support for the proposal, and explained the benefits of using district cooling services for non-residential buildings. Dr LO urged other members to expedite deliberation and approval of the item.

Benefits of the District Cooling System

7. Mr Albert CHAN expressed support for the item and cited several benefits in enhancement of energy efficiency and environmental protection.

8. Mr CHAN Chi-chuen asked the Administration to elaborate on how buildings using district cooling services could save the upfront capital cost by about 5% to 10% of the total building cost. He also enquired about the building installations necessary to subscribe to the district cooling services.

9. Assistant Director/Electricity and Energy Efficiency, Electrical and Mechanical Services ("AD/EE") explained that buildings using district cooling services for air-conditioning would save the upfront capital cost of constructing chiller plant rooms, as well as procuring and installing a central air-conditioning system with chillers. Those buildings would only have to construct a substation housing the heat exchangers for connecting to the DCS, as well as pipes to supply chilled water to individual floors.

10. Mr WONG Yuk-man asked the Administration to provide information on countries that had implemented district cooling systems and their cost benefits. Deputy Secretary for the Environment ("DSE") undertook to provide such information after the meeting.

11. Mr CHAN Chi-chuen sought explanations on the Administration's estimation of energy savings with the use of DCS vis-a-vis other cooling facilities.

12. AD/EE explained that based on overseas experience, DCS was proved to be an energy-efficient air-conditioning system as it had been shown to consume 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. Actual energy savings would be evaluated when the DCS at the KTD operates in full capacity.

13. Ms Claudia MO noted that the implementation of DCS would bring about a reduction of about 60 000 tonnes of carbon dioxide emission per annum. She asked what the carbon dioxide emission DCS would generate.

14. AD/EE said that based on the estimated amount of electricity consumption in KTD, and by comparing conventional cooling systems and the DCS at KTD, the Administration estimated that implementation of DCS at KTD could reduce carbon dioxide emission from 170 000 tonnes to 110 000 tonnes per annum, which would be a reduction of 35%.

Cost over-runs

15. Mr LEUNG Kwok-hung considered the project expensive. He noted that the proposed DCS was intended to support Government and other community facilities to be provided in KTD. He queried whether the large scale facility would be wasted if some of the Government facilities fell through and thus DCS would be operating below full capacity. DSE said that the DCS was to be developed in phases to dovetail the programme and progress of other infrastructure developments in the pipeline in KTD area.

16. Mr LEUNG Kwok-hung and Mr WONG Yuk-man opined that the project to build DCS at KTD was expensive and was no exception to the multiple Government works projects that had suffered from cost over-runs, as project estimate of DCS project had reportedly risen from \$1.67 billion from 2009 to the current estimate at \$4.9 billion. Mr CHAN Chi-chuen shared the same concerns and noted that the large cost overrun was partly due to the need to lay underground ducts and pipes, the cost of which was not included in the earlier estimates. He asked whether the increase in APE would be sufficient to cover the necessary works and that the Administration would not need to seek further increase in APE.

17. DSE explained that the latest APE for the DCS project (i.e. \$4,945.5 million in money-of-the-day prices) had already been set out in the discussion paper submitted to and approved by the Public Works Subcommittee in 2013. The Administration had been seeking funding in phases, and the cost for the remaining works of the DCS project was estimated to be about \$1.1 billion.

The project had also proceeded as planned within budget, and the Administration was confident that the revised APE would be sufficient to cover the necessary costs.

18. Mr LEUNG Yiu-chung noted that the operational cost of the DCS was expected to increase over time. He enquired about the charging mechanism to achieve full cost recovery.

19. DSE said that the charging mechanism had been set out in the District Cooling Services Ordinance, Cap. 624. There were mainly two parts to the tariff, namely capacity charge and consumption charge. Capacity charge was calculated with a view to achieving full cost recovery on the capital cost, operation cost and maintenance cost of the DCS, and would be adjusted based on the Composite Consumer Price Index annually. Consumption charge would vary with the actual consumption of district cooling services by users. The tariff would be reviewed at least once every five years.

20. Mr LEUNG Kwok-hung asked whether DCS users were required to sign a long term agreement with the Administration and whether the price was fixed in the agreement. DSE said that after signing an undertaking with the Administration on the provision of district cooling services, the contract cooling capacity could be adjusted by the DCS users by serving an advance notice to the Government if needed and as appropriate.

21. Mr LEUNG Kwok-hung asked if the Administration could cope with the request for increasing cooling capacity after the commissioning of DCS. DSE said there was 10% of spare capacity to meet future increase in demand.

Full cost recovery

22. Mr CHAN Chi-chuen enquired about the operational life of the DCS which would affect the basis of calculation for full cost recovery. DSE said that the operational life of the equipment and that of plant rooms of the DCS were 30 years and 50 years respectively.

23. Mr LEUNG Kwok-hung and Mr WONG Yuk-man expressed doubts about the feasibility of achieving full cost recovery from DCS consumers over the project life at about 30 years as planned. Members enquired whether the Administration had implemented the legislation and administrative arrangements for mandating the use of DCS in non-residential buildings and the fee-charging mechanism.

24. DSE replied that the District Cooling Services Ordinance, Cap. 624, which was passed by the Legislative Council and enacted in March 2015, empowered the Government to impose charges for the use of district cooling services and provided the charging mechanism. The Administration would conduct a tariff review at least once every five years. DSE added that the conditions of land leases would include provisions requiring all private non-domestic developments to connect to DCS. DSE said that by using district cooling services, individual users could enjoy the benefits of saving cost and space for installing alternative cooling systems, and that the cost of DCS was more economical compared with that of conventional water cooling systems.

25. Mr James TO enquired whether the capacity of DCS was sufficient to serve all Government buildings and non-residential developments at KTD. Mr TO also asked whether DCS could serve residential developments in the area, and whether the spare capacity would be wasted if not all of the non-residential developments used DCS. He asked under such circumstances, whether DCS could be extended to adjacent areas. DSE confirmed DCS would have the capacity to serve all Government buildings and private non-residential developments, depending on the availability of cooling capacity or cooling demand, the Administration might examine the feasibility to extend such services to buildings in adjacent areas.

26. Mr James TO and Mr LEUNG Kwok-hung opined that the Administration's assumption that all of the target developments would subscribe to DCS might be overly optimistic. Both members expressed concerns about a potential waste of public money for building DCS at such a high cost without achieving full cost recovery within its operational life due to insufficient subscribers. If KTD was underutilized, the tariff charged to individual DCS users could be raised which would in turn further reduce usage.

27. DSE said in case there was underutilization, DCS could be expanded to provide cooling services to other buildings adjacent to the KTD area so as to maximize utilization. AD/EE supplemented that technical issues of expanding the area coverage of DCS, if needed in the future, were not expected to be insurmountable.

28. Mr WU Chi-wai noted that the DCS had a breakeven period of 30 years. He also noted that the progress of development of KTD was behind schedule. Mr WU enquired whether the delay in the completion of these developments would affect the cost recovery period. Mr LEUNG Kwok-hung enquired whether the full cost recovery schedule of DCS would be affected by

the delays in the construction of the Shatin Central Line ("SCL"), and whether the consequential shortfall would be made up by increasing the tariff on other DCS users.

29. DSE said that as the period of full cost recovery was 30 years, minor delay on the progress of KTD would unlikely affect the breakeven period.

Quality control on building materials

30. Mr Albert CHAN expressed concerns about the Administration's ability to monitor and control the quality of construction works, and to safeguard against the use of substandard materials. He enquired whether Mainland-manufactured pipes and parts, including prefabricated parts, had been used in DCS Phase IIIB and DCS Phase III (Package A) ("Phase IIIA"). He urged the Administration not to use Mainland manufactured materials for both phases of DCS. Mr LEUNG Yiu-chung shared similar views.

31. AD/EE responded that for DCS Phase IIIA, some materials were manufactured in the Mainland and shipped to Hong Kong for installation. The materials to be used for DCS Phase IIIB had not been finalized as the contracts had not been awarded. Also, the Administration was only responsible for laying down the pipe network between the central chiller plants and the consumer buildings. The internal pipe network within a building was the management's responsibility of individual buildings. AD/EE supplemented that the chilled water used in the DCS pipe network was sterilized to deter bacteria growth.

32. Mr CHAN Chi-chuen, Mr LEUNG Yiu-chung and Mr Albert CHAN expressed their skepticism to the Administration's assurance. They enquired about the detailed arrangements for quality control on metal parts used for the project. Mr CHAN Chi-chuen urged the Administration to enhance the quality control regime, such as including specific requirements banning Mainland metal parts from being used in DCS Phase IIIB.

33. AD/EE said that it would be difficult under the current tendering system to restrict materials of a certain origin from being used in Government projects. Nevertheless, the Administration had adopted a stringent quality control regime, such as conducting regular on-site inspections, for monitoring the quality of materials used for the project. Staff would also be deployed to check the manufacturing facilities in the Mainland. An independent consultant would be engaged to monitor the quality of the materials used.

Site monitoring

34. Mr WONG Yuk-man expressed concerns about the nuisances caused by the construction works to residents nearby, and sought clarifications on the duration of the short term impacts of the works as assessed by the Administration.

35. AD/EE replied that the construction period of DCS Phase IIIB would take about two years. He explained that the "short term impact" would mainly arise from the laying of ducts and pipes which would be carried out on and off during the construction period. Mitigation measures would be carried out according to the recommendations of the Environment Impact Assessment Study and independent consultants would be engaged to monitor the construction works, and inspectors would be stationed at the work sites to ensure proper compliance. Furthermore, the works took place in new roads to be completed under the development programme of the KTD, and hence there were no residential developments in the vicinity for the time being.

Development progress

36. Mr WU Chi-wai enquired about the pace of installing the cooling plants for the DCS, and the proportion of DCS capacity to be used by the Kai Tak Multi-purpose Sports Centre ("MPSC").

37. AD/EE said that the Administration had been installing cooling plants with cooling capacity according to the progress of the KTD. The Kai Tak MPSC, when completed, would only use a small part of DCS's capacity. As the design of the Kai Tak MPSC had not been completed, the actual requirement could not be confirmed at this stage and the cooling equipment for the Kai Tak MPSC would be installed in due course.

38. In response to Mr WU's follow-up enquiries, AD/EE said that the funding being sought would cover the works of laying of ducts and pipes for DCS in tandem with the planned road works in KTD, and the installation of cooling equipment to meet the needs of scheduled developments in KTD.

39. Mr Albert CHAN enquired whether Government buildings and nearby Mass Transit Railway stations of the SCL would subscribe to DCS. AD/EE confirmed Mr CHAN's understanding, and said that common charging rates were applicable for all buildings regardless of their load profiles.

40. Commenting that the progress of KTD had suffered various setbacks such as delays in the development of the SCL, Mr LEUNG Kwok-hung

enquired about how the development of DCS would keep pace with the changing scope and pace of the KTD.

41. DSE said that the Administration had endeavoured to ensure that the DCS project could tie in with the progress and development of KTD, and had been seeking funding by phases accordingly.

Recycling of construction waste

42. Mr WONG Yuk-man expressed concerns about recycling practices of the construction contractor. He enquired how the Administration would monitor the recycling of inert construction waste.

43. AD/EE said that to monitor the transport and disposal of construction waste, the Administration had adopted a trip-ticket system. The contractor would be required to complete a standard trip-ticket form for the designated disposal facility. Once the waste was delivered to the designated facility, a receipt would be issued to the vehicle operator for return to the project engineer representative for verification of the contractor's compliance with the policy requirements.

Other issues

44. Mr WU Chi-wai noted, from documents of the Kwun Tong District Council, that the Civil Engineering and Development Department ("CEDD") had planned to relocate the inlet and outlet of seawater pump house for the DCS to reduce water pollution and foul odour at the Kai Tak Nullah. He enquired whether this plan would affect the cost and progress of the Phase IIIB works.

45. AD/EE said that the current seawater pipe network had gone through environmental impact assessment. The study conducted by the CEDD would not affect the cost and progress of Phase IIIB works.

46. The Chairman announced that the meeting be adjourned, and discussion on the item would continue at the ensuing meetings scheduled for the day.

47. The meeting was adjourned at 11:00 am.