立法會 Legislative Council

LC Paper No. CB(1)1306/18-19 (These minutes have been seen by the Administration)

Ref: CB1/PL/EA

Panel on Environmental Affairs

Minutes of meeting held on Monday, 27 May 2019, at 2:30 pm in Conference Room 3 of the Legislative Council Complex

Members present: Dr Hon Junius HO Kwan-yiu, JP (Chairman)

Hon HUI Chi-fung (Deputy Chairman)

Hon CHAN Hak-kan, BBS, JP

Dr Hon Priscilla LEUNG Mei-fun, SBS, JP

Hon Steven HO Chun-yin, BBS

Hon Frankie YICK Chi-ming, SBS, JP

Hon WU Chi-wai, MH Hon CHAN Chi-chuen Hon KWOK Wai-keung, JP Hon Dennis KWOK Wing-hang Dr Hon Elizabeth QUAT, BBS, JP

Hon Martin LIAO Cheung-kong, SBS, JP Ir Dr Hon LO Wai-kwok, SBS, MH, JP

Hon CHUNG Kwok-pan Hon CHU Hoi-dick Hon SHIU Ka-fai Hon YUNG Hoi-yan

Hon Kenneth LAU Ip-keung, BBS, MH, JP

Hon Jeremy TAM Man-ho

Hon Tony TSE Wai-chuen, BBS

Members attending: Hon Charles Peter MOK, JP

Hon CHAN Han-pan, BBS, JP

Hon KWONG Chun-yu

Members absent : Hon Kenneth LEUNG

Hon Tanya CHAN

Public Officers attending

For item V

Mr WONG Kam-sing, GBS, JP Secretary for the Environment

Mr Paul WONG

Principal Assistant Secretary for the Environment (Energy)

Mr Alfred SIT, JP

Director of Electrical and Mechanical Services/

General Manager

Electrical and Mechanical Services Department

Mr VY Ek-chin

Assistant Director (Electricity and Energy

Efficiency)

Electrical and Mechanical Services Department

For item VI

Mr TSE Chin-wan, BBS, JP Under Secretary for the Environment

Mr CHEN Che-kong

Assistant Director (Water Policy)

Environmental Protection Department

Mr Anthony FOK

Principal Environmental Protection Officer

(Sewerage Infrastructure)

Environmental Protection Department

Mr WONG Sui-kan

Assistant Director (Projects and Development)

Drainage Services Department

Mr YIP Tat-ming

Acting Chief Engineer (Sewerage Projects)

Drainage Services Department

Clerk in attendance: Ms Angel SHEK

Chief Council Secretary (1)1

Staff in attendance: Mr Jason KONG

Senior Council Secretary (1)1

Miss Mandy POON

Legislative Assistant (1)1

Action

I. Application for late membership

(LC Paper No. CB(1)1097/18-19(01) — Letter from Hon Jeremy TAM Man-ho on application for membership (English version only))

At the invitation of the Chairman, <u>Mr Jeremy TAM</u> explained that as Ms Tanya CHAN would not be able to attend Panel meetings in the near future, he sought to be admitted as a member of the Panel in order to maintain Civic Party's level of representation at the Panel.

2. The <u>Chairman</u> invited members to consider whether to accept Mr Jeremy TAM's application for late membership. <u>Members</u> did not raise objection. The <u>Chairman</u> declared that Mr TAM's application be accepted.

II. Confirmation of minutes

(LC Paper No. CB(1)981/18-19 — Minutes of the meeting held on 25 February 2019)

3. The minutes of the meeting held on 25 February 2019 were confirmed.

III. Information papers issued since last meeting

4. <u>Members</u> noted that no information paper had been issued since the last meeting.

IV. Items for discussion at the next meeting

(LC Paper No. CB(1)1083/18-19(01) — List of follow-up actions

LC Paper No. CB(1)1083/18-19(02) — List of outstanding items for discussion)

- 5. <u>Members</u> agreed to discuss the following items at the next regular meeting:
 - (a) Council for Sustainable Development's public engagement on long-term decarbonization strategy;
 - (b) holistic fisheries management strategy in marine parks; and
 - (c) provision of sewerage network in North District.
- 6. The <u>Chairman</u> said that the next regular meeting originally scheduled for 24 June 2019 would be rescheduled to allow sufficient time for discussion of the above three items. Members would be advised of the new meeting date in due course.

(*Post-meeting note*: The Chairman subsequently instructed that the next regular meeting be rescheduled to be held on Tuesday, 2 July 2019. As a Red Alert was issued by the Legislative Council ("LegCo") Secretariat on 1 July 2019 and the LegCo Complex was not open for use on 2 July 2019, the meeting was eventually cancelled.)

V. Promotion of energy efficiency and conservation as well as renewable energy through innovation and technology

(LC Paper No. CB(1)1083/18-19(03) — Administration's paper on "Promotion of Energy Efficiency and Conservation as well as Renewable Energy through Innovation and Technology"

LC Paper No. CB(1)1083/18-19(04) — Updated background brief on "Promotion of energy efficiency and

conservation and renewable energy in Hong Kong" prepared by the Legislative Council Secretariat)

Briefing by the Administration

- 7. The <u>Secretary for the Environment</u> ("SEN") gave introductory remarks on the measures implemented by the Administration to meet the relevant targets of reducing energy intensity and carbon intensity in connection with the Energy Saving Plan for Hong Kong's Built Environment 2015~2025+ ("Energy Saving Plan"), the Paris Agreement and the Hong Kong's Climate Action Plan 2030+. Then, with the aid of a PowerPoint presentation, the <u>Director of Electrical and Mechanical Services/General Manager</u> ("DEMS") briefed the Panel on the Administration's efforts to promote energy efficiency and conservation ("EE&C") as well as renewable energy ("RE") through innovation and technology ("I&T") including:
 - (a) launch of the E&M InnoPortal in June 2018, which served to match the service needs of various government departments, public organizations and the electrical and mechanical ("E&M") trade with related I&T solutions (including those related to EE&C and RE) proposed by universities, research organizations and start-ups;
 - (b) establishment of strategic partnership between the Electrical and Mechanical Services Department ("EMSD") and major I&T solution providers in Hong Kong through a Memorandum of Cooperation ("MoC");
 - (c) collaboration between EMSD and the E&M trade to develop I&T solutions which could enhance the operational efficiency in delivering services and the energy performance of government premises; and
 - (d) provision of one-stop technical support by EMSD to government bureaux and departments ("B/Ds") in support of the pro-innovation procurement policy.

(*Post-meeting note*: The PowerPoint presentation materials were circulated to members on 27 May 2019, vide LC Paper No. CB(1)1116/18-19(01).)

Discussion

E&M InnoPortal

- 8. Dr Elizabeth OUAT, Mr Frankie YICK, Mr Charles Peter MOK and Mr Tony TSE welcomed the launch of the E&M InnoPortal. Mr MOK and Mr TSE suggested the Administration enhance marketing and publicity of the E&M InnoPortal to the I&T industry, trade unions and the general public, with a view to promoting exchanges on service needs and solutions. should also recognize the relevant Administration initiatives and achievements of B/Ds in enhancing their services with new technologies so as to inspire further innovation. Mr CHU Hoi-dick considered that matters related to the E&M InnoPortal should better be deliberated at meetings of the Panel on Information Technology and Broadcasting in future as the matters covered a wide range of innovative technologies, not just those related to the environment.
- 9. DEMS advised that EMSD had been collaborating with the E&M trade to develop I&T solutions that could help government departments, public organizations, etc. enhance their operational efficiency in delivering services and the energy performance of government premises. EMSD would sign an MoC with interested local universities and research organizations, and co-organize I&T seminars with these strategic partners to introduce their I&T solutions to B/Ds, and showcase the relevant I&T projects. In addition, the Environment Bureau and EMSD would organize a thematic Green I&T Day on 6 August 2019 tentatively to showcase the I&T achievements in relation to EE&C and RE in Hong Kong. DEMS said that since its introduction in June 2018, the E&M InnoPortal had collected more than 150 service needs and over 90 solutions. Trials on over 50 of these solutions were being conducted (11 of which were on EE&C and RE), covering a wide range of innovative technologies. DEMS further advised that EMSD had produced promotional clips targeting at start-ups. He took note of Mr Tony TSE's suggestion to also make available promotional clips targeting at the general public. <u>DEMS</u> assured members that the Administration would continue to step up promotion of the E&M InnoPortal.
- 10. Referring to the list of technology development needs (i.e. I&T wish list) on the E&M InnoPortal website (as at 27 May 2019), Mr CHU Hoi-dick considered the success rate of matching rather low (i.e. only five matched cases in relation to the some 150 technology development needs collected so far). He noted that, for example, the Food and Environmental Hygiene Department was looking for a mouse counting system inside drainage channels but no solution had yet been identified. He therefore asked about the roles of EMSD and other B/Ds in raising technology development needs

and identifying potential I&T solutions to meet such needs.

- 11. <u>DEMS</u> explained that EMSD acted as a facilitator between B/Ds and start-ups. For example, in relation to the service needs raised by the Correctional Services Department ("CSD") to enhance the efficiency and security of prison management, EMSD had discussed the service needs with CSD and translated the needs into technical requirements to facilitate discussion with start-ups on the potential I&T solutions. <u>DEMS</u> said that while the E&M InnoPortal served mainly the service needs of B/Ds, public organizations and the E&M trade could also raise their service needs and suggestions on this platform.
- 12. Mr Martin LIAO enquired whether the performance reports of the field trials of matched cases would be made available and uploaded onto the E&M InnoPortal within a specified timeframe for early reference of the public. He suggested B/Ds and relevant organizations share on the platform their experiences and suggestions to improve the I&T solutions for wider application.
- 13. <u>DEMS</u> concurred with Mr LIAO's suggestion. He advised that upon completion of trial runs, EMSD would issue objective performance reports to the universities, research organizations or start-ups concerned, which could help the latter promote their relevant products/services more effectively. EMSD would endeavour to issue the validated performance reports and upload them onto the E&M InnoPortal as soon as practicable.
- 14. At the request of the Chairman, the <u>Administration</u> agreed to provide supplementary information on the respective number of I&T solutions uploaded onto the E&M InnoPortal by each of the 12 prospective I&T strategic partners (as at 27 May 2019) of EMSD.

(*Post-meeting note*: The Administration's written response was circulated to members on 26 July 2019, vide LC Paper No. CB(1)1287/18-19(02).)

Other initiatives for promoting energy efficiency and conservation and renewable energy

Building energy efficiency

15. Mr SHIU Ka-fai and Mr Tony TSE expressed support for the promotion of EE&C and RE through I&T. Mr SHIU observed that measures implemented by the Administration in recent years had raised public awareness of energy conservation. He asked about the tax incentives for

members of the public to adopt environmental practices. <u>Mr TSE</u> suggested the Administration provide more incentives to encourage and support the private sector to install energy-efficient building and RE installations (in particular those with short payback periods), such as by providing subsidies for the upfront payments of such installations.

- 16. The <u>Principal Assistant Secretary for the Environment (Energy)</u> ("PAS(E)") highlighted that starting from the year of assessment 2018-2019, enhanced tax incentives had been offered to enterprises by allowing them to claim tax deduction for capital expenditure incurred for procuring eligible environmental protection installations in full in one year instead of over five years as provided for under the Inland Revenue Ordinance (Cap. 112) to encourage the procurement of such installations.
- 17. <u>SEN</u> and <u>PAS(E)</u> advised that under the post-2018 Scheme of Control Agreements, the two power companies had expanded the scopes of their respective funds to support the carrying out of retro-commissioning and retrofitting at existing buildings (covering both residential and non-residential buildings) and implementation of building-based smart/IT technologies, with a view to enhancing the energy efficiency of these buildings.
- 18. <u>DEMS</u> supplemented that the Administration had been promoting energy saving measures in existing buildings in the following three major aspects:
 - (a) requiring owners of commercial buildings and commercial portion of composite buildings to conduct energy audits in accordance with the Buildings Energy Efficiency Ordinance (Cap. 610), and developers/owners of designated categories of buildings to comply with the statutory minimum building energy efficiency standards when carrying out major retrofitting works or works for superstructure construction of those buildings;
 - (b) promoting retro-commissioning to raise the energy efficiency performance of existing buildings; and
 - (c) providing financial assistance to building owners under different funding schemes for implementing energy saving measures.
- 19. <u>Mr CHU Hoi-dick</u> enquired about the rate of reduction in Hong Kong's energy intensity since announcement of the Energy Saving Plan. The <u>Administration</u> undertook to provide the requested information after the

meeting.

(*Post-meeting note*: The Administration's written response was circulated to members on 26 July 2019, vide LC Paper No. CB(1)1287/18-19(02).)

District cooling system

- 20. <u>Ir Dr LO Wai-kwok</u> considered the adoption of district cooling system ("DCS") at the Kai Tak development an effective measure to reduce carbon emissions and improve the environment (such as mitigating the urban heat island effect in the area concerned). He enquired about the Administration's plan to adopt DCS in other new development areas. The <u>Chairman</u> asked about the feasibility of laying chilled water distribution pipes of DCS when rehabilitating ageing underground sewers in built-up areas.
- 21. <u>DEMS</u> advised that according to a pilot study conducted by the Administration, DCS consumed 35% less electricity than that of traditional air-cooled air conditioning system. It was planned to adopt DCS in the Tung Chung New Town Extension and Kwu Tung North New Development Areas. Subject to technical practicability and financial viability, the Administration would consider implementing DCSs in other new development areas as well. As regards adopting DCS in developed areas, there would be technical/site constraints and greater cost implications associated with laying chilled water distribution pipes where there were existing underground public utilities, as well as environmental concerns such as disposal of existing air conditioning systems (which might not have expired their service lives) to make way for cooling supply with DCS in the premises/facilities concerned.

Promotion of green data centre strategy

- 22. <u>Dr Elizabeth QUAT</u> noted that the Administration had promulgated the Green Data Centre Practices to B/Ds. As green data centre systems/facilities could be expensive upfront, she asked if the Administration would provide any incentives to encourage private operators to adopt green data centre practices.
- 23. <u>DEMS</u> responded that the Administration had been sharing with the relevant industries the relevant guidelines/practices in green data centre management, including how to enhance the efficiency of the data centre cooling systems (such as by adopting a design separating the cooling system of human comfort cooling from that of the data centre). He considered that the long-term cost savings from reduced energy consumption by green data centres and hence lower tariffs should create good incentives to encourage

wider adoption of green data centre practices in the private sector.

Adoption of light emitting diode lighting system

- 24. While commending on the Administration's continued efforts in implementing various measures to promote EE&C and RE, <u>Dr Elizabeth QUAT</u> considered the progress rather slow, such as in the retrofitting of light emitting diode ("LED") lighting systems.
- 25. <u>DEMS</u> responded that the Administration had been progressively retrofitting/adopting LED lights in public lighting systems (e.g. retrofitting of LED exit signs), and would commence the LED road lights replacement programme. EMSD would also consider extending the Mandatory Energy Efficiency Labelling Scheme to cover LED lighting products, so as to facilitate the comparison of the energy efficiency of these products by consumers.

Expanding charging network for electric vehicles

- 26. Mr Jeremy TAM and Dr Elizabeth QUAT urged the Administration to strengthen the promotion of wider use of electric vehicles ("EVs") by expanding the EV charging network. Noting that the operation contracts of dedicated auto-liquefied petroleum gas ("LPG") filling stations would expire between 2021 and 2022, Mr TAM considered this an opportune time for the Administration to review the use of the sites in question, including considering installation of EV chargers at LPG filling stations (apart from installation of EV chargers at taxi stands and on-street parking spaces which he also advocated). Dr QUAT considered that the Administration could make reference to overseas experiences in setting up dedicated EV charging lanes (i.e. with embedded EV chargers) so that EVs could recharge wirelessly while they were driven along the lanes.
- 27. <u>SEN</u> stressed that the Administration adopted a multi-pronged strategy to combat climate change. Apart from promoting EE&C (which accorded priority to raising building energy efficiency) and RE, the Administration also attached great importance to improving roadside air quality and alleviate the adverse effects of climate change by replacing fuelengined vehicles with clean energy vehicles (including EVs). <u>DEMS</u> supplemented that the Administration had been extending the public EV charging networks at government car parks, including upgrading existing standard chargers to medium chargers and installing additional medium chargers.

28. The <u>Chairman</u> requested the Administration to provide information on the road maps and implementation timetables for the following initiatives on promoting EE&C as well as reducing greenhouse gas emissions: (a) replacing street lamps with LED lights; (b) encouraging data centre operators to adopt green data centre practices, including reducing energy consumption on air conditioning; and (c) further expanding the charging network for EVs with a view to promoting the adoption of such vehicles. The <u>Administration</u> undertook to provide the requested information.

(*Post-meeting note*: The Administration's written response was circulated to members on 26 July 2019, vide LC Paper No. CB(1)1287/18-19(02).)

Use of biodiesel

- 29. Mr Frankie YICK opined that the use of biodiesel in lieu of conventional diesel was conducive to reducing air pollution. He relayed the concern of a biodiesel producer who came, under the auspices of Invest Hong Kong, to invest in Hong Kong in 2013 by setting up a biodiesel plant that since then the Government had not actively promoted the use of biodiesel, resulting in a persistently low demand for biodiesel over the years. Mr YICK enquired whether the Administration would introduce specific measures to promote the wider use of biodiesel. Referring to the issues and recommendations raised by the Competition Commission in its Report on Study into Hong Kong's Auto-fuel Market, including the recommendation of withdrawing one of the two varieties of 98 RON petrol to make way for the introduction of other auto-fuel, Mr YICK enquired whether Administration would take the opportunity when re-tendering petrol filling station sites to incorporate, into the relevant land leases granted/renewed for filling stations, a provision requiring the lessees to provide biodiesel as an alternative auto-fuel.
- 30. <u>SEN</u> responded that the Administration had been promoting the use of biodiesel by government departments. A green procurement policy was implemented to engage government departments to try out fuelling their vessels, vehicles and equipment with biodiesel as a replacement of conventional diesel. The Administration had also required, through tendering and contractual arrangements, the full use of biodiesel by non-road construction machinery in all newly tendered public works projects. It should be noted that while the use of biodiesel could help reduce carbon emission, it could also increase the emission of some major air pollutants. A balance should therefore be struck between decarbonization and reduction of major air pollutants when considering the promotion of biodiesel.

VI. Yuen Long Effluent Polishing Plant

(LC Paper No. CB(1)1083/18-19(05) — Administration's paper on "4408DS — Yuen Long Effluent Polishing Plant")

Briefing by the Administration

- 31. The <u>Under Secretary for the Environment</u> ("USEN") advised that the Administration proposed upgrading part of 4408DS Yuen Long Effluent Polishing Plant ("YLEPP") to Category A at an estimated cost of \$6,861.4 million in money-of-the-day prices for taking forward the stage 1 upgrading of the Yuen Long Sewage Treatment Works ("YLSTW") to cater for the projected population growth in the plant's catchment. Then, with the aid of a PowerPoint presentation, the <u>Assistant Director (Projects and Development)</u>, <u>Drainage Services Department</u> ("AD(P&D)/DSD") briefed members on the key aspects of the proposed project.
- 32. <u>Members</u> noted that coloured copies of the PowerPoint presentation materials printed by the Administration had been tabled at the meeting. To save ink, <u>Mr CHU Hoi-dick</u> suggested that the coloured backgrounds of PowerPoint presentation materials should not be printed in future.

(*Post-meeting note*: The PowerPoint presentation materials were circulated to members on 27 May 2019, vide LC Paper No. CB(1)1116/18-19(02).)

(At 4:21 pm, the Chairman directed that the meeting be suspended for a few minutes and be extended for 15 minutes beyond the appointed ending time. The meeting subsequently resumed at 4:26 pm.)

Discussion

33. The <u>Chairman</u> reminded members that in accordance with Rule 83A of LegCo's Rules of Procedure ("RoP"), they should disclose the nature of any direct or indirect pecuniary interests relating to the funding proposal under discussion at the meeting before they spoke on the item. He also drew members' attention to Rule 84 of RoP on voting in case of direct pecuniary interest.

General issues

- 34. <u>Ir Dr LO Wai-kwok</u>, <u>Mr Tony TSE</u>, <u>Mr Kenneth LAU</u> and <u>Mr Martin LIAO</u> expressed support for the proposed project. <u>Mr LAU</u> called on the Administration to minimize the traffic and air quality impacts of the proposed project.
- 35. Mr CHU Hoi-dick agreed with the proposal of upgrading the sewage treatment level ("treatment level") of the existing YLSTW for protecting the water quality of the receiving waters of Deep Bay.
- 36. Mr Tony TSE enquired how the Administration decided the treatment level of each sewage treatment plant in Hong Kong.
- 37. <u>USEN</u> explained that the treatment level of a sewage treatment plant mainly depended on the plant's location and the treatment level required for protecting the water quality of the receiving water bodies in question. For example, as the receiving water bodies of the Stonecutters Island Sewage Treatment Works ("SCISTW") had relatively high assimilative capacity due to strong currents, chemically-enhanced primary treatment was considered sufficient for the purpose of protecting water quality, whereas secondary treatment was required at some other sewage treatment works. As Deep Bay was a semi-enclosed water body with a relatively lower assimilative capacity, the Administration considered that the treatment level of the existing YLSTW should be upgraded to the tertiary standard if its treatment capacity was to be increased from 70 000 cu m per day ("m³/day") to 100 000 m³/day, with a view to maintaining the water quality there at a satisfactory level.

Environmental implications

Water quality impact

- 38. <u>Ir Dr LO Wai-kwok</u> asked about the effluent discharge outlet of the proposed YLEPP.
- 39. <u>USEN</u> advised that the discharge outlet of the existing YLSTW would remain unchanged after the proposed upgrading works. Wastewater treated by the proposed YLEPP would be discharged into Shan Pui River and enter Deep Bay downstream. As the treatment level of the plant would be upgraded from the secondary standard to tertiary, its effluent discharge would cause less pollution to the receiving waters after the proposed works despite the increase in treatment capacity.

- 40. <u>Mr KWONG Chun-yu</u> and <u>Mr Kenneth LAU</u> were concerned whether the proposed YLEPP's effluent discharge would affect the water quality of the oyster culture area in Deep Bay.
- 41. <u>USEN</u> responded that some oyster farmers had raised concern about the potential impact of the effluent discharge on the salinity level of the oyster culture area, which was several kilometres away from the proposed YLEPP. According to the environmental impact assessment ("EIA") of the proposed project, the effluent discharge would only slightly affect the salinity level of the oyster culture area under certain conditions, and hence its impact would be insignificant. In fact, some natural phenomena such as tidal flows and rain were likely to affect the salinity level of the oyster culture area to even greater degrees. After the completion of the proposed project, the Drainage Services Department would set up monitoring stations in the receiving water bodies in accordance with the requirements of the relevant Environmental Permit to ascertain whether the actual water quality impact of the proposed project was in line with the EIA study results.
- 42. Mr Tony TSE enquired whether the demolition and reconstruction of part of the existing YLSTW under the proposed project would temporarily reduce its treatment capacity, and if so, how the Administration would mitigate the resultant environmental impact.
- 43. <u>AD(P&D)/DSD</u> responded that under the proposed project, about half of the existing facilities of YLSTW would be demolished to make room for the construction of new facilities, and the other half, with a treatment capacity of about 35 000 m³/day, would be kept in operation during construction. As the current volume of sewage generated from the YLSTW catchment was about 25 000 to 28 000 m³/day, it was expected that the above remaining treatment capacity would be sufficient in the interim before completion of the proposed project.

Odour impact

44. <u>Ir Dr LO Wai-kwok</u> considered that the fully-enclosed design of the proposed YLEPP would be effective in reducing odour and noise nuisance arising from its operation, as evidenced by a similar design adopted in SCISTW. The <u>Chairman</u>, however, pointed out that there were persistent odour problems on Stonecutters Bridge. He asked whether the odour emanated from SCISTW and how the Administration would tackle the problem.

45. <u>USEN</u> and the <u>Assistant Director (Water Policy)</u> ("AD(WP)") advised that the sludge generated from wastewater treated by SCISTW was handled in enclosed facilities within the plant. The sludge was regularly transported by sea to T · PARK, a sludge treatment plant, with enclosed containers that were equipped with vent pipes to release the gases generated from the decomposition of sludge inside the containers. During the hot seasons, the release of gases might result in odour leak. To tackle the problem, the Administration had added odour filters to the vent pipes of the sludge containers, and recently improved the sludge transportation procedures by rescheduling the sludge loading time to late afternoon and shortening the time of storing the loaded containers pending the vessels' departure. <u>USEN</u> supplemented that, compared with SCISTW, the proposed YLEPP was expected to perform better as it would be more extensively enclosed and installed with deodorization systems.

Ecological impact

46. Mr KWONG Chun-yu asked how the Administration would minimize the proposed project's impact on the natural habitats in Nam San Wai. <u>USEN</u> advised that to mitigate the ecological impact of the proposed project, construction hours would be restricted and certain noisy works would not be carried out near the site boundary adjacent to nesting trees during the major visiting/breeding periods of migratory waterbirds that used the Mai Po Inner Deep Bay Ramsar Site.

Financial implications and cost-effectiveness analysis

- 47. Mr Tony TSE sought information on the feasibility and cost-effectiveness analysis of possible alternative options for increasing the treatment capacity of YLSTW while protecting the water quality of the receiving water bodies. He specifically asked whether the Administration had considered transferring the treated effluent to other receiving waters.
- 48. <u>USEN</u> advised that the Administration had considered several alternatives to meet the increased demand for sewage treatment capacity in the YLSTW catchment, and they were not as cost-effective as the current proposal. For instance, the option of transferring the treated effluent to Urmston Road would require the construction of deep sewer/tunnel and associated pumping stations, etc., and render the overall construction cost higher than the current proposal.

Admin

49. <u>Mr Tony TSE</u> and the <u>Chairman</u> requested the Administration to provide more information on the above issue before submitting the relevant funding proposal to the Public Works Subcommittee ("PWSC").

(*Post-meeting note*: The Chinese and English versions of the Administration's written response were circulated to members on 11 and 18 June 2019 respectively, vide LC Paper No. CB(1)1175/18-19(02).)

50. In response to Mr KWONG Chun-yu's question, <u>USEN</u> said that the Administration would not increase the rate of sewage charge in order to recover the capital cost of the proposed project.

Renewable energy features

- 51. <u>Ir Dr LO Wai-kwok</u> sought elaboration on the renewable energy equipment to be installed at the proposed YLEPP, including whether such equipment would be able to supply surplus electricity to the power grid.
- 52. <u>AD(P&D)/DSD</u> explained that combined heat and power units would be installed for utilizing the biogas derived from the digestion of sludge as fuel for power and heat generation. In addition, it was estimated that over 4 000 photovoltaic panels would be installed at the project site. Renewable energy generated from such equipment was expected to meet about 15% to 20% of the proposed YLEPP's electricity demand, and hence there would not be any surplus electricity to be exported to the power grid.
- 53. The <u>Chairman</u> and the <u>Deputy Chairman</u> asked about the Administration's plan to incorporate food waste/sewage sludge co-digestion facilities, if any, in the proposed YLEPP, and the expected construction cost of such facilities.
- 54. <u>USEN</u>, <u>AD(P&D)/DSD</u> and <u>AD(WP)</u> responded that space at the southwest corner of the project site had been reserved for the construction of food waste/sewage sludge co-digestion facilities in future, with an expected food waste treatment capacity of about 200 tonnes per day. The financial provisions for the construction of such facilities were not included in the current proposal. This was because the application of the anaerobic co-digestion technology at the proposed YLEPP and some other sewage treatment plants would be subject to the results of a relevant trial scheme to be conducted at the Tai Po Sewage Treatment Works. The construction of facilities for the trial scheme had recently been completed, and the Administration would examine through the trial scheme the feasibility and

cost-effectiveness of recycling food waste in Hong Kong using the anaerobic co-digestion technology.

Other measures to protect the water quality of Deep Bay

- Mr CHU Hoi-dick remarked that according to the report on "River Water Quality in Hong Kong in 2017" issued by the Environmental Protection Department, the Water Quality Index grades of the monitoring stations at Kam Tin River and Yuen Long Creek, which flowed into Deep Bay, were "very bad". He considered that the Administration should draw up a comprehensive blueprint for protecting the water quality of Deep Bay, or else the efforts in reducing the pollution caused by treated sewage would be undermined by the continued pollution from other sources, such as unsewered villages, livestock farms and brownfield operations. He also questioned about the slow progress in developing sewerage systems in unsewered villages in the Yuen Long and Kam Tin areas.
- 56. Mr Kenneth LAU called on the Administration to expedite the expansion of the public sewerage network to unsewered villages across the territory.
- 57. <u>USEN</u> responded that the provision of trunk sewers was a prerequisite for the development of village sewerage systems. The Administration had been endeavouring to provide sewerage facilities to unsewered villages across the territory, and had consulted the Panel on several related proposals in recent months. It would seek the Panel's views on other related proposals when ready.
- 58. As regards the sewerage projects in the Yuen Long and Kam Tin areas, <u>AD(WP)</u> advised that while the Administration had put much effort on consulting stakeholders on the projects, the construction of trunk sewers at some places still could not be proceeded with as the local communities had not reached a consensus on the proposed works. The Administration would continue to maintain close communications with the local communities with a view to building a consensus on the sewerage projects.

Admin

59. The <u>Chairman</u> and <u>Mr CHU Hoi-dick</u> requested the Administration to provide supplementary information on the overall strategy and related measures for reducing polluted discharges entering Deep Bay.

(*Post-meeting note*: The Chinese and English versions of the Administration's written response were circulated to members on 11 and 18 June 2019 respectively, vide LC Paper No. CB(1)1175/18-19(02).)

Conclusion

60. The <u>Chairman</u> concluded that members did not object to the Administration's submission of the relevant funding proposal to PWSC.

VII. Any other business

61. There being no other business, the meeting ended at 4:32 pm.

Council Business Division 1 <u>Legislative Council Secretariat</u> 18 September 2019