

立法會
Legislative Council

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Panel on Environmental Affairs

**Minutes of special meeting
held on Thursday, 13 March 2014, at 9:30 am
in Conference Room 3 of the Legislative Council Complex**

Members present : Hon Cyd HO Sau-lan (Chairman)
Hon CHAN Hak-kan, JP (Deputy Chairman)
Hon James TO Kun-sun
Hon WONG Ting-kwong, SBS, JP
Hon CHAN Kin-por, BBS, JP
Hon Albert CHAN Wai-yip
Hon Claudia MO
Hon Steven HO Chun-yin
Hon Frankie YICK Chi-ming
Hon Gary FAN Kwok-wai
Dr Hon Kenneth CHAN Ka-lok
Hon Kenneth LEUNG
Dr Hon Helena WONG Pik-wan
Dr Hon Elizabeth QUAT, JP
Ir Dr Hon LO Wai-kwok, BBS, MH, JP

Members absent : Hon LEE Cheuk-yan
Hon Vincent FANG Kang, SBS, JP
Hon WU Chi-wai, MH
Hon Charles Peter MOK
Hon CHAN Han-pan
Hon Dennis KWOK
Hon Christopher CHUNG Shu-kun, BBS, MH, JP
Hon Tony TSE Wai-chuen

**Public Officers
attending : For item I**

Ms Christine LOH, JP
Under Secretary for the Environment

Mr Elvis AU, JP
Assistant Director
(Nature Conservation & Infrastructure Planning)
Environmental Protection Department

Clerk in attendance : Ms Miranda HON
Chief Council Secretary (1)1

Staff in attendance : Miss Lilian MOK
Senior Council Secretary (1)1

Ms Mandy LI
Council Secretary (1)1

Miss Mandy POON
Legislative Assistant (1)1

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I. 5172DR – Organic Waste Treatment Facilities Phase 1

(LC Paper No. CB(1)1074/13-14(01) — "5172DR – Organic Waste Treatment Facilities Phase 1: Information Note on Project Cost Estimate" provided by the Administration

LC Paper No. CB(1)1074/13-14(02) — Background brief on "Organic Waste Treatment Facilities Phase 1" prepared by the Legislative Council Secretariat)

1. The Under Secretary for the Environment ("USEN") briefly introduced the background of the development of the Organic Waste Treatment Facilities

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("OWTF") Phase 1 in Siu Ho Wan, North Lantau. The Assistant Director of Environmental Protection (Nature Conservation & Infrastructure Planning) ("ADEP(NC&IP)") then updated members on the project cost estimate for OWTF Phase 1. He said that the estimated project cost presented to the Panel in November 2010, which was \$489 million in money-of-the-day ("MOD") prices, was an indicative figure based on an initial, broad-brush scheme. According to the re-tendering exercise conducted in February 2013, the Administration estimated that the capital cost of the OWTF Phase 1 project would be \$1,532.8 million in MOD prices.

2. Mr Albert CHAN said that he had to leave the meeting and requested to put on record his objection to the OWTF Phase 1 project. As requested by Mr CHAN, the Chairman read out his note which set out the reasons for his objection. In his note, Mr CHAN stated that he would object to the project due to the Administration's faulty strategy. He opined that the Administration should legislate for source separation of waste in Hong Kong, or else individual recycling schemes and programmes, such as recycling food waste, would not be cost-effective. Besides, the site selection and design of OWTF Phase 1 were also faulty.

Cost estimate of OWTF Phase 1

3. Mr Kenneth LEUNG expressed concern about the increase in the capital cost of the OWTF Phase 1 project. Ms Claudia MO and Mr Frankie YICK shared the view that the Administration should explore room for reducing the capital cost of the project. ADEP(NC&IP) explained that the main reason for the difference between the latest project cost and the initial estimate in 2010 was the significant increase in the costs of capital works projects in recent years and the additional provisions to provide sufficient and robust treatment capacity of OWTF Phase 1, which included the pre-treatment facilities to render the food waste collected suitable for anaerobic digestion, the increased waste water treatment requirements, the environmental mitigation and monitoring measures and the natural terrain and slope protection cum mitigation works. ADEP(NC&IP) further advised that the provision of \$41.5 million for the design and construction of pollution control and environmental monitoring facilities would include the implementation of the mitigation measures recommended in the environmental impact assessment ("EIA") study of the OWTF Phase 1 project.

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4. As requested by Mr Kenneth LEUNG, USEN undertook to provide a breakdown of the estimated capital costs of \$489 million for OWTF Phase 1 when the funding proposal of the project was submitted to the Panel on 22 November 2010 to facilitate a cost comparison with the updated estimated capital cost of \$1,532.8 million prior to submitting the funding proposal of the

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project to the Public Works Subcommittee ("PWSC") for consideration.

(Post-meeting note: The Administration's response was circulated to members vide LC Paper No. CB(1)1140/13-14(01) on 21 March 2014.)

Treatment capacity of OWTF Phase 1

5. Dr Kenneth CHAN expressed support for the timely development of OWTF Phase 1 to recycle the large amount of food waste generated every day. Noting that the Administration had introduced a guaranteed food waste tonnage of 50 tonnes per day for OWTF Phase 1, he doubted whether the amount of food waste to be recycled at OWTF Phase 1 would meet the guaranteed tonnage. ADEP(NC&IP) responded the introduction of a guaranteed food waste tonnage for OWTF Phase 1 was meant to share out the risk of waste quantity uncertainty between the Government and the contractor of OWTF Phase 1. In 2012, Hong Kong produced about 3 300 tonnes of food waste per day, of which over 800 tonnes were generated from the commercial and industrial ("C&I") sector (such as restaurants and food production industries). Since the C&I sector would be the first to use OWTF Phase 1, it was expected that OWTF Phase 1 could handle 200 tonnes of food waste soon after it was commissioned in 2016.

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6. As requested by Dr Kenneth CHAN, the Chairman urged the Administration to provide information on the estimated recurrent expenditure of OWTF Phase 1 and how the fees and charges would be determined in accordance with the "polluter pays" principle, prior to submitting the project to PWSC for consideration.

(Post-meeting note: The Administration's response was circulated to members vide LC Paper No. CB(1)1140/13-14(01) on 21 March 2014.)

Construction and operation of OWTF Phase 1

7. Mr CHAN Kin-por expressed support for the Administration to expeditiously take forward the development of OWTF Phase 1 to recycle source-separated food waste to useful products and minimize the reliance on landfill disposal. He further enquired about the construction timetable for the project. ADEP(NC&IP) advised that tender evaluation of the OWTF Phase 1 project had already been completed and the Administration planned to award the design-build-operate ("DBO") contract for the project to the successful tenderer in mid 2014 after the funding approval. Subject to the funding approval of the Legislative Council, the payment to the contractor would be made in phases from 2014-2015 to 2017-2018. The contractor was expected to commence the design and site formation works in 2014-2015 and OWTF Phase 1 would be commissioned by end of 2016.

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8. Dr Elizabeth QUAT also supported the development of OWTF Phase 1 to turn unavoidable food waste to useful resources. She was of the view that OWTF Phase 1 would set the model for other OWTF to follow and gain support from the general public for the development of other waste-to-energy facilities in Hong Kong. To promote public awareness of food waste reduction, Dr QUAT enquired whether OWTF Phase 1 would have a role to play in providing environmental education and co-ordinating recycling activities. ADEP(NC&IP) responded that the Administration attached great importance to environmental education and planned to include environmental education elements in OWTF Phase 1 to convey food waste avoidance and reduction messages and explain the operation of the facility to the public. The details would be considered once the Administration had received the detailed design proposal from the contractor.

9. Noting that OWTF Phase 1 would be treating food waste generated by the C&I sector when it was commissioned in 2016, Dr Elizabeth QUAT further asked how the Administration would prioritize the collection of food waste from different C&I establishments. USEN advised that in preparation for recycling food waste on a large scale, the Administration had gained experience on food waste source separation and collection over the past few years through the Food Waste Recycling Partnership Scheme ("the Partnership Scheme") which had been launched by ENB and the C&I sector in June 2010 with a view to promoting good food waste management practice and gaining experience on food waste source separation and recycling. In anticipation that the C&I establishments participating in the Partnership Scheme would deliver food waste to OWTF Phase 1, the plant should be able to handle 200 tonnes of food waste when it was commissioned in 2016. By the time when OWTF Phase 2 came into operation in 2018-2019, more source separated food waste from the C&I sector would be treated.

Conversion of food waste to electricity and animal feed

10. Ir Dr LO Wai-kwok said that despite the substantial increase in the capital cost of the OWTF Phase 1 project, he would support the project with a view to creating a network of recycling plants to treat and recycle food waste. Noting that OWTF Phase 1 would recover energy from food waste to generate electricity to meet its internal demand, he opined that the Administration should proactively explore the viability of uploading the surplus electricity to the existing power grid. Mr Kenneth LEUNG and Dr Elizabeth QUAT also enquired about the handling of the surplus electricity generated from the energy recovered from the food waste recycled at OWTF Phase 1.

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11. ADEP(NC&IP) responded that the Administration had explored with a power company the feasibility of connecting OWTF Phase 1 to the existing power grid and the result was positive. Upon awarding the contract of the project, the Administration would negotiate with the power company the terms of sales and the detailed technical requirements. It was estimated that about 14 million kWh of surplus electricity could be exported upon the full operation of OWTF Phase 1 per year. The Administration planned to export part of the surplus electricity to the nearby government facilities including the Siu Ho Wan Water Treatment Works and the Siu Ho Wan Sewage Treatment Works, as well as the existing power grid. The provision of \$99.6 million under the capital cost of the OWTF Phase 1 project would cover the cost of power generation and the surplus electricity export systems.

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12. The Chairman requested the Administration to provide information on the estimated amount of electricity to be generated by OWTF Phase 1 and the corresponding tariffs if the Administration was to sell the electricity generated to the power companies, before submitting the proposal to PWSC for consideration.

(Post-meeting note: The Administration's response was circulated to members vide LC Paper No. CB(1)1140/13-14(01) on 21 March 2014.)

13. Ir Dr LO Wai-ki further asked if the Administration would consider converting food waste into fish feed or compost products. USEN responded that OWTF Phase 1 would turn food waste into useful compost products and biogas for energy recovery. While a private recycling company in the EcoPark was turning food waste into fish feed, the demand for animal feed in Hong Kong was limited. It might also be difficult for the OWTF Phase I contractor to monitor the quality of the food waste collected which might contain potential risk materials not suitable for conversion to animal feed.

Environmental impact of OWTF Phase 1

14. Noting the Administration's plan to further develop Lantau Island where a range of tourist attractions such as Hong Kong Disneyland and Ngong Ping 360 were located, Mr WONG Ting-ki expressed concern that the potential odour and hygiene problems of OWTF Phase 1 might reduce the attractiveness of Lantau Island to tourists and visitors. The transportation of food waste to OWTF Phase 1 might also increase the traffic flow of local busy roads and cause traffic congestion.

15. ADEP(NC&IP) responded that in conducting site search for OWTF Phase 1, the Administration had examined the potential environmental and

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traffic impact of the project on Siu Ho Wan. The Administration anticipated that there should not be a significant increase in traffic flow or any adverse traffic impact on Siu Ho Wan. USEN further advised that the Administration would conduct a study on the collection and delivery of food waste, including the transportation arrangements, the suitable types of collection vehicles and the appropriate ancillary and supporting facilities, and work out a comprehensive plan for transporting food waste from different waste sources to OWTFs.

Food waste management

16. Ms Claudia MO was of the view that there was a need to treat and recycle the huge amount of food waste generated in Hong Kong every day. With reference to the successful waste management system of Seoul, she shared Mr Albert CHAN's views that there should be more commitment on the part of the Administration to promote source separation of waste so as to recycle food waste from the waste stream as far as possible. Otherwise, the current practice of disposing of food waste at landfills would not only deplete the limited landfill space, but would also create odour nuisance to nearby residents. She further commented that the general public might not understand that "organic waste" referred to "food waste" as the former was not a common term used in daily life.

17. USEN agreed that the Administration should strengthen its efforts to promote public awareness of the food waste problem in Hong Kong and instill behavioural changes in various sectors of the community, with a view to avoiding and reducing food waste generation. To this end, the Environment Bureau ("ENB") had published "A Food Waste and Yard Waste Plan for Hong Kong 2014-2022" ("the Food Waste and Yard Waste Plan") to articulate specific strategies for tackling organic waste. ADEP(NC&IP) supplemented that ENB had been closely collaborating with the C&I sector on food waste source separation and recycling. For example, more than 120 organizations had participated in the Partnership Scheme and some 1 400 tonnes of food waste had so far been collected for recycling. The Administration had also drawn up guidelines on the management and source separation of food waste and organized training workshops on food waste reduction management practices for the C&I sector.

18. In response to Mr WONG Ting Kwong's enquiry about the Administration's long-term strategy to tackle the problem of food waste in Hong Kong, USEN advised that the Administration planned to develop more OWTF in different districts for collecting and recycling source separated food waste. It was envisaged that Hong Kong needed to build a network of around five to six OWTF. OWTF Phase 1 was expected to be commissioned in 2016 and the EIA study for OWTF Phase 2 had been completed. The Administration had also

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identified a suitable site for constructing OWTF Phase 3 and the EIA study for the project would be taken forward shortly.

19. Pointing out that over 3 000 tonnes of food waste were generated in Hong Kong every day, Dr Helena WONG expressed concern that even if the Administration built a network of five to six OWTF with a total treatment capacity of about 1 300 to 1 500 tonnes of food waste per day, these OWTF could only treat about half of the daily food waste generated. She enquired about the future development of OWTF and how the Administration would work on the initiative to tackle food waste. USEN responded that community mobilization was of paramount importance in reducing and recycling food waste. The Food Waste and Yard Waste Plan issued by ENB had set out the details of a multi-pronged approach to tackle food waste and yard waste. Based on the experience of South Korea and Taipei, the capacity of their treatment facilities was able to deal with approximately 50% of the city's food waste, which was similar to the expected recycling rate of food waste of Hong Kong.

20. In response to Dr Helena WONG's further enquiry about the collection of food waste, USEN acknowledged that the separation and collection of food waste was a critical aspect of any food waste recycling system. Given that there were many types of residential dwellings in Hong Kong and the collection of food waste from domestic sources was more challenging than from C&I establishments, the Administration would initiate a study on food waste collection and delivery to actively consider the necessary arrangements and ancillary facilities required.

21. Ir Dr LO Wai-kwok noted from the Panel's overseas duty visit to the United Kingdom, the Netherlands, Denmark and Sweden conducted in early March 2014 that many overseas waste treatment facilities had incorporated social, recreational and educational facilities which were well received by the public. The design of these facilities also matched in harmony with different environments and blended with other local community amenities. He urged the Administration to explore how the design of local waste treatment facilities could blend into the surrounding environment as well as to ensure the recovery of materials with economic value, thereby achieving a sustainable circular economy.

Food donation

22. While expressing support for the project, Mr Frankie YICK said that some hotels in Hong Kong would donate surplus edible food to charitable organizations voluntarily. He sought elaboration on food donation from hotels in Hong Kong. USEN responded that the Administration did not have such information. Nevertheless, the Administration had been communicating closely

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with some non-government organizations ("NGOs") to assist them to establish links with local food manufacturers/suppliers, including restaurants, hotels and food premises, and facilitate their collaboration with food manufacturers/suppliers in developing food donation programmes.

23. As regards the concern of food donors about the potential legal liability arising from food donation, USEN explained that the Centre of Food Safety had issued a set of food safety guidelines on food recovery with food safety principles that should be applied to food donation, regardless of the types and sources of food. Some NGOs had also entered into food donation agreements with their donors to deal with food safety liability issues, thereby overcoming food donors' concerns over the legal liability of food donation. Notwithstanding USEN's explanation, Mr Frankie YICK strongly urged the Administration to strengthen its support of the work of NGOs to increase the collection of surplus food from local food manufacturers/suppliers for donation to the needy and to encourage chain food premises to participate in food donation activities to minimize food waste.

Concluding remarks

24. The Chairman concluded that with the exception of Mr Albert CHAN, members were supportive of the submission of the OWTF Phase 1 project to PWSC for consideration.

II. Any other business

25. There being no other business, the meeting ended at 10:38 am.