立法會 Legislative Council

LC Paper No. CB(1) 2261/09-10 (These minutes have been seen by the Administration)

Ref: CB1/PL/EA/1

Panel on Environmental Affairs

Minutes of meeting held on Monday, 26 April 2010, at 2:30 pm in Conference Room A of the Legislative Council Building

Members present: Hon Audrey EU Yuet-mee, SC, JP (Chairman)

Hon CHAN Hak-kan (Deputy Chairman)

Ir Dr Hon Raymond HO Chung-tai, SBS, S.B.St.J., JP

Hon James TO Kun-sun

Hon WONG Yung-kan, SBS, JP Hon Andrew CHENG Kar-foo

Hon LEE Wing-tat

Hon Jeffrey LAM Kin-fung, SBS, JP Hon CHEUNG Hok-ming, GBS, JP

Prof Hon Patrick LAU Sau-shing, SBS, JP

Hon KAM Nai-wai, MH Hon Cyd HO Sau-lan Hon CHAN Kin-por, JP

Member absent : Hon Miriam LAU Kin-yee, GBS, JP

Public officers attending

For item IV

Dr Kitty POON

Under Secretary for the Environment

Mr Carlson K S CHAN

Deputy Director of Environmental Protection (3)

Mr MOK Wai-chuen

Assistant Director (Air Policy)

Environmental Protection Department

Mr Edmond HO

Principal Environmental Protection Officer

(Mobile Source)

Environmental Protection Department

For item V

Dr Kitty POON

Under Secretary for the Environment

Miss Katharine CHOI

Principal Assistant Secretary for the Environment

(Energy)

Mr SZETO Wing-sum

Senior Engineer/Project 7

Electrical & Mechanical Services Department

Clerk in attendance: Miss Becky YU

Chief Council Secretary (1)1

Staff in attendance : Mrs Mary TANG

Senior Council Secretary (1)2

Miss Mandy POON

Legislative Assistant (1)4

Action

I. Confirmation of minutes

(LC Paper No. CB(1) 1660/09-10

— Minutes of the meeting held on 22 February 2010)

The minutes of the meeting held on 22 February 2010 were confirmed.

II. Information paper issued since last meeting

2. <u>Members</u> noted the following information papers which had been issued since last meeting -

LC Paper No. CB(1) 1569/09-10(01) — Copied letter from the Hong Kong and CB(1) 1569/09-10(02) — Retail Management Association together with the Administration's

response regarding the Product Eco-responsibility (Plastic Shopping Bags) Regulation

III. Items for discussion at the next meeting

(LC Paper No. CB(1) 1663/09-10(01) — List of follow-up actions LC Paper No. CB(1) 1663/09-10(02) — List of outstanding items for discussion)

- 3. The <u>Chairman</u> said that the Administration had proposed to discuss the following items at the next regular meeting scheduled for Monday, 24 May 2010, at 2:30 pm -
 - (a) Designation of Special Areas for the Hong Kong National Geopark; and
 - (b) 329DS Upgrading of Pillar Point sewage treatment works

The <u>Chairman</u> added that Mr KAM Nai-wai had put forward a written request for the Panel to discuss the environmental issues pertaining to the Framework Agreement on Hong Kong/Guangdong Co-operation, particularly the Pearl River Delta Regional Air Quality Management Plans and the Mirs Bay water quality district control strategies. <u>Members</u> agreed to include the subject in the agenda for the next regular meeting.

4. The <u>Chairman</u> said that further to the joint meeting with the Panel on Transport on 22 January 2010 to discuss the rationalization of bus routes to improve air quality, the Administration proposed to brief the two Panels on the latest progress of the subject. <u>Members</u> agreed to hold a joint meeting on Monday, 28 May 2010, from 8:30 am to 9:30 am.

IV. Pilot Green Transport Fund

(LC Paper No. CB(1) 1663/09-10(03) — Administration's paper on Pilot Green Transport Fund)

5. The <u>Under Secretary for the Environment (USEN)</u> briefed members on the Administration's proposal to set up a \$300 million Pilot Green Transport Fund (PGTF) for application by the transport industry, initially by public transport operators. The Fund would encourage the transport industry to introduce more innovative green technologies, contributing to better air quality and health of people living in Hong Kong. The Administration would like to seek members' views on the operation of the Fund before drawing up the implementation details.

Types of green and innovative technologies

6. Mr Jeffrey LAM noted that since the introduction of incentive schemes to

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encourage the use of cleaner vehicles, there had been much interest in the development and introduction of electric vehicles and green transport technologies to Hong Kong. While welcoming PGTF which was a sound proposal, Mr LAM stressed the need for more flexibility in assessing applications to encourage participation in PGTF. This would not only enable the budding of green technologies, but also promote a low-carbon economy in Hong Kong. He added that the Members belonging to the Economic Synergy had earlier submitted a proposal to the Environment Bureau regarding the use of selective catalytic reduction (SCR) devices to reduce nitrogen oxides and improve the emission performance of Euro II and III models to Euro IV and V standards. It was worth noting that some bus companies had retrofitted their vehicles with SCR devices. Given that retrofitting vehicles with SCR devices (which only cost around \$100,000 to \$200,000) was more cost-effective than replacement of vehicles, consideration should be given to including SCR devices in PGTF so that the transport trades could apply funding for retrofitting SCR devices to promote green transport.

- 7. <u>USEN</u> responded that while SCR devices were found to be effective in reducing emissions, their suitability for the day-to-day operation under the local circumstances had yet to be tested. The Administration would decide on the level of funding for such trials taking into account views from members and the trades. The <u>Assistant Director of Environmental Protection (Air Policy)</u> (ADEP(AP)) added that SCR devices had already been included as a standard fitting in some new Euro IV buses manufactured in Europe. Studies had found that retrofitting of SCR devices on Euro II and III models was able to reduce more than 60% of their nitrogen oxide emissions, thereby raising their emission performance to the level of Euro IV or above. The Administration had been discussing with local bus companies on undertaking a trial of retrofitting SCR devices in their Euro II and III buses, subject to the availability of space for the retrofit. The Administration would decide on the way forward based on the outcome of the trial.
- Mr CHAN Kin-por enquired if ferry operators using ultra low sulphur diesel 8. (ULSD) would be eligible for PGTF. The Chairman also enquired whether supporting infrastructure to facilitate the introduction of new transport technologies, such as charging facilities for electric vehicles, was covered under PGTF. that applications involving operating systems, equipment or machinery (including charging systems) which supported the use of cleaner vehicles would be eligible under Details of applications would be worked out in consultation with stakeholders. The Deputy Director of Environmental Protection (3) (DDEP(3)) added that the objective of PGTF was to encourage the transport sector to test out green and low-carbon transport technology, and to introduce more innovative green technologies. As ULSD had been introduced and used in land transport for a long time, this could not be considered an innovative technology. Notwithstanding, a subsidy of around \$10 million had been earmarked for ferry companies to conduct trials on the use of ULSD in ferries. Preliminary findings indicated that the use of ULSD by ferries was feasible, but the related cost implications would need to be further studied since the cost of ULSD was higher than that of conventional fuels. It was worth noting that apart from using ULSD, retrofitting ferry engines with emission reduction devices

could also help reduce sulphur emissions. Ferry companies could apply for PGTF to conduct trials on the use of emission reduction devices on ferries. Referring to the allegation that the use of ULSD would cause damage to the ferry engines, Mr CHAN Kin-por asked if technologies that would help prevent such damage could be eligible for PGTF. DDEP(3) said that the trials on the use of ULSD in ferries was meant to assess the impact of the fuel on ferry engines. So far, the use of ULSD had no adverse impacts on the engine.

- Given the ready availability of green transport technologies overseas, Mr KAM Nai-wai held the view that PGTF should aim at testing out their suitability for day-to-day operation rather than encouraging their development in Hong Kong. He also enquired the basis upon which the funding of \$300 million for PGTF was arrived at, and whether the Administration had in mind any innovative technologies which should be introduced for trial by the transport sector in Hong Kong. ADEP(AP) advised that PGTF was meant to provide the incentive for suppliers to introduce green transport technologies Hong Kong, and encourage the transport sector to try out these technologies for use in the day-to-day operation in Hong Kong. innovative transport technologies currently available would include electric and hybrid Emission reduction devices, such as SCR and particulate removal devices, which could be retrofitted onto vehicles and ferries could also be considered for USEN added that researchers who wished to undertake inclusion under PGTF. research and development of innovative technologies should apply for the Innovation They could apply for PGTF in conjunction with transport and Technology Fund. operators if they wished to test the applicability of their technologies to the day-to-day operation of local transport trades. As regards the allocation of \$300 million for setting PGTF, USEN said that this was worked out taking into account the retrofitting cost for enhancing the emission performance of vehicles and ferries as one of the The Administration would monitor the progress of application and review the need for additional funding if necessary. Further thoughts would be given to promoting the use of successful innovative technologies after the trials under separate funding.
- 10. Mr WONG Yung-kan enquired whether transport technologies developed in the Mainland could be considered for introduction into Hong Kong, and the means through which the effectiveness of PGTF could be monitored. USEN said that the Mainland had been very proactive in developing new transport technologies, such as electric and hybrid vehicles. The Environmental Protection Department had visited some Mainland vehicle manufacturing companies, and had since maintained close liaison with them regarding their latest technological developments. PGTF would be applicable to all potential green transport technologies, including those developed in the Mainland. A committee would be set up to vet PGTF applications.

Eligible applicants

11. While supporting PGTF to encourage the introduction of green transport technologies in Hong Kong, Mr CHAN Hak-kan pointed out that the funding of \$300 million might only be sufficient for the trial on SCR devices, but not other

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innovative transport technologies given wide range of transport modes, including taxis, buses, public light buses and ferries. Hence, a more flexible funding arrangement should be adopted to encourage participation, particularly those non-franchised bus companies which might not have the resources to pair up with research institutes in their applications. When approving PGTF applications, there was a need to ensure the practicality of the technologies and their applicability to Hong Kong. Mr CHAN Kin-por said that instead of encouraging eligible applicants to pair up with potential suppliers of green transport technologies and research institutes in their applications, the Administration should take a more proactive role by inviting the eligible applicants to test out the green transport technologies. USEN agreed to the need for flexibility in operating PGTF. The Administration would facilitate transport operators, including operators of non-franchised buses, to pair up with researchers and suppliers of green transport technologies in their applications for PGTF if they wanted to try out innovative transport technologies. In this connection, the Administration had held discussions with suppliers of green transport technologies and research institutes as well as stakeholders on the operation of PGTF.

- 12. <u>Mr KAM Nai-wai</u> enquired if owners of public light buses (PLB) could apply for PGTF for the use of electric PLB for certain routes in Hong Kong. <u>USEN</u> said that the eligibility for PGTF would depend on whether the technology was an innovative one. PLB operators wishing to try out electric vehicles which had not been used in Hong Kong could apply for funding under PGTF.
- The Chairman sought elaboration on the vetting criteria for PGTF applications, and the means to assess the performance of green technologies. Given the many types of transport technologies, she enquired if there was a funding cap for PGTF applications, and whether there were any specific technologies which the Administration would like to introduce to Hong Kong using PGTF. USEN said that the Administration would consider setting up a committee comprising experts in transport technologies to vet PGTF applications, and engaging a third party to evaluate the environmental performance of the new technologies under trial and report the outcome to the Environmental Protection Department. On the types of transport technologies to be eligible under PGTF, DDEP(3) explained that PGTF would apply to many types of transport technologies, ranging from hybrid vehicles to emission reduction devices. Given the wide price ranges of these technologies, it would be difficult to estimate at this stage whether the allocation of \$300 million would be sufficient for the purpose. The Administration had held briefing sessions with public transport operators, potential suppliers of innovative green transport technologies and academics in March 2010 to gather their initial views on PGTF. It would work out the implementation framework of PGTF, including eligibility criteria and funding arrangements, in the light of members' views for further consultation with stakeholders. The funding proposal would be submitted to the Finance Committee for approval in the next legislative session with a view to setting up PGTF on or before 31 March 2011.

14. The <u>Chairman</u> opined that it would be difficult to draw a line on the eligibility for PGTF, given the varied nature of transport technologies. While supporting the need for flexibility in the vetting process, she expressed concern about possible abuse in the absence of objective funding criteria. Care should be taken in vetting PGTF applications to avoid cases where funding was provided for technologies which were later found to be impractical for use in Hong Kong.

Other incentive schemes to encourage the use of cleaner vehicles

15. Professor Patrick LAU said that to make the best use of PGTF, there might be a need to set up a committee to invite expert views on the types of technologies to be introduced to Hong Kong. Clear guidelines on the application for PGTF should also be worked out to avoid overlapping with other incentive schemes to encourage early replacement of more polluting vehicles. DDEP(3) confirmed that consideration was being given to setting up a committee comprising academics and experts in transport technologies to advise on the operation of PGTF. He reiterated that PGTF was not meant for research and development of green transport technologies but for testing of the suitability of these technologies in their day-to-day operation in Hong Kong. Applicants under PGTF were also eligible for other incentive schemes so long as they met the eligibility criteria under these schemes. Therefore, owners of Euro II diesel commercial vehicles who chose to replace their vehicles with electric or hybrid models would be eligible for both PGTF and the one-off grant scheme to encourage the early replacement of Euro II diesel commercial vehicles announced by the Financial Secretary under the 2010-2011 Budget. The Administration would work out the implementation details of PGTF taking into account views of members and While supporting in principle the setting stakeholders. up of PGTF, Mr WONG Yung-kan was concerned that some vehicle/vessel owners who chose to use green transport technologies could enjoy double benefits while others could not The Chairman however accepted that applicants who were willing to benefit at all. try out new innovative vehicles could benefit both from PGTF and the one-off grant schemes for the replacement with cleaner vehicles.

Way forward

16. Mr KAM Nai-wai said that he might not necessarily support PGTF. He was concerned that while funding could be made available for trials of expensive green technologies, such as hybrid vehicles, the trades might not have sufficient resources to continue with the use of these technologies even if these were found to be suitable for use in Hong Kong. The same applied to the SCR devices given the significant cost implications if these were retrofitted to existing vehicles/vessels on a large scale. He considered it necessary for the Administration to be more specific about the types of technologies to be put on trial, the way forward in promoting their use on a larger scale if these technologies were found to be successful. PGTF would not serve its purpose if the trades were not prepared to continue with the use of the new technologies after successful trials. He hoped that the Administration could provide more information on how to encourage the continued use of successful technologies when reverting back to the Panel in the next legislative session.

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17. The <u>Chairman</u> enquired if the Administration could work out the implementation details of PGTF in October 2010 so that a meeting (jointly with the Panel on Transport if necessary) could be arranged to invite views from stakeholders. <u>USEN</u> agreed to revert back to the Panel once the implementation details had been worked out.

V. Environment and Conservation Fund - Buildings Energy Efficiency Funding Schemes

(LC Paper No. CB(1) 1663/09-10(04) — Administration's paper on Environment Conservation and **Buildings** Fund Energy **Efficiency Funding Schemes** LC Paper No. CB(1) 1663/09-10(05) — Paper **Buildings** on Energy Efficiency Funding Schemes prepared by the Legislative Council Secretariat (background brief))

18. <u>USEN</u> briefed members on the progress of implementation of the Buildings Energy Efficiency Funding Schemes (the Schemes) set up under the Environment and Conservation Fund (ECF).

Progress update

- 19. Mr CHAN Hak-kan noted from the progress update that the Schemes were quite well received. Given that 439 out of 1 078 applications received under the Schemes required further information from applicants, Mr CHAN Hak-kan enquired about the types of information sought. The Principal Assistant Secretary for the Environment (Energy) (PASE(E)) said that the most common type of additional information required was authorization letters from applicants in case the applications were submitted by, say, property management companies on behalf of the applicants. Others included details of projects, such as the number of energy efficient equipment to be installed. A hotline had been set up to answer public enquiries on the Schemes.
- 20. Mr KAM Nai-wai opined that the high rejection rate under the Schemes might be attributed to the limited information available for public access, and inadequate knowledge of the staff concerned. As a result, many management companies were not aware of the proper application procedures and requirements under the Schemes. Some applications were rejected because the management companies had proceeded with the tender before submitting their applications. He considered it necessary for the Administration to review the rejected applications. Expressing similar concerns, Mr CHAN Hak-kan said that some OCs had carried out major retrofitting works to improve the energy efficiency of their buildings without knowing the existence of the Schemes. After they had found out about the Schemes, they were not allowed to submit applications since the tender/installation works had already begun. He enquired if the Administration was prepared to exercise discretion to accept these

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belated applications under the Schemes. <u>PASE(E)</u> said that as the Schemes were funded by public money, there was a need to ensure that all projects under the Schemes were carried out in a proper manner and had gone through competitive tender procedures. Hence, prior approval would need to be obtained before commencement of any projects. Applications with which works had already been commenced would not be considered. In fact, most funding schemes would not allow retrospective funding for projects which had already started.

- Ms Cyd HO held the view that if it was the Administration's intention to 21. encourage owners to improve the energy efficiency of their building services installations, it should adopt a more proactive approach to facilitate applications for the Hence, the Administration should assist the owners of the 144 rejected applications and 68 withdrawn applications to meet the requirements under the PASE(E) said that applicants whose applications had been rejected would be informed of the reasons for refusal. She recalled that when the Schemes were first launched, the Administration had rejected a number of applications from churches and schools since they could not meet the eligibility criteria, and separate funding under ECF was made available for application by non-governmental organizations for implementation of energy efficiency measures. These organizations were advised to re-submit their applications to the relevant schemes. At members' request, the Administration undertook to provide a breakdown on the rejected applications, including those from churches/schools, and applications which did not meet with the eligibility criteria.
- 22. The <u>Chairman</u> enquired whether all buildings in Hong Kong, except for non-governmental organizations which could seek separate funding under ECF, were eligible for the Schemes. <u>PASE(E)</u> advised that recipients of ECF funding should normally be non-profit organizations. Commercial buildings solely owned by a single proprietor would not be eligible for the Schemes.

Energy efficiency projects

- 23. Given that the bulk of Energy efficiency projects (EEP) applications were from residential buildings, Mr CHAN Hak-kan enquired about the reason for the low participation rate of commercial and industrial buildings, and whether this was attributed to the lack of owners' corporations for these buildings or the lack of interest of owners in improving energy efficiency. USEN said that owners of commercial and industrial building were generally more conscious of the need to conserve energy and had already implemented energy efficiency measures in their buildings to help reduce operating cost. The subsidies provided under the Schemes had indeed encouraged owners of residential buildings to take actions to enhance energy efficiency as evidenced by the number of applications received from them.
- 24. <u>Mr KAM Nai-wai</u> said that he had received a complaint from an OC which had applied for funding for an EEP to replace two lifts at a cost of about \$0.9 million. Contrary to its expectation of receiving funding equivalent to 50% of the total actual expenditure, only \$0.14 million were approved for the project. He sought elaboration

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on the basis upon which funding was granted for different types of building services PASE(E) said that funding applications were vetted by the Energy Conservation Projects Vetting Sub-committee. In vetting these applications, the Sub-committee would only consider those building services installations which could directly improve energy efficiency. Of the 246 approved EEP applications, 195 were related to lighting, two to air-conditioning, three to electricity, 24 to lifts and escalators, nine to lighting and air-conditioning, five to lighting and electricity, four to lighting and lifts and four to lighting, air conditioning and electricity. Most of the EEP projects involved replacement of lighting installations covering a wide range of products, such as light emitting diode, compact fluorescent lamps, exit lamps and energy power savers, etc. For lifts, funding would be provided for addition or replacement of the motor drive and mechanical drive of a lift, but not the flooring and panels as these would not contribute to the energy efficiency of the lift. applications for the Scheme, guidelines on the scope of funding and proper application procedures had been provided to management companies. They were also made aware that funding would not be provided for EEPs which had been commenced before approval.

- 25. <u>Ms Cyd HO</u> however pointed out that the choice of materials would have a bearing on the energy performance of lifts. By way of illustration, a lift made of a lighter material would reduce the weight of the lift and thus improving its energy efficiency. <u>PASE(E)</u> said that Building Energy Codes had provided details about energy efficient installations relating to lighting, electricity, air-conditioning, lifts and escalators. These would provide useful reference to facilitate owners to make an informed choice on installations that would be eligible for funding under the Schemes.
- Mr KAM Nai-wai noted that according to the information provided on the 26. internet, funding for EEPs under the Schemes would be made on a matching basis subject to a funding limit of 50% of the approved total actual expenditure and a cap of There was no mention that funding would only be \$0.5 million per building. provided for building services installations which would improve energy efficiency. As a result, many OCs were under the impression that 50% of the cost of their EEPs would be funded under the Schemes. If it eventually came out that funding was less than expected and owners had to pay for the cost which was outside their budget, this would lead to disputes between owners and OCs. He opined that the guidelines should be more explicit about the building services installations, including parts of lift, which would be eligible under the Schemes as otherwise owners would not know the funding they would be entitled to. Consideration should be given to reviewing the Schemes to cover standard fittings of lifts. PASE(E) said that funding mechanism under the Schemes had been clearly set out in the guidelines. The objective of the funding was to encourage building owners to carry out alteration, addition or improvement works to upgrade the energy efficiency performance of building services installations in common areas of residential, commercial or industrial buildings. Nevertheless, she agreed to include more detailed information on the funding arrangements in the future publicity materials on the Schemes.

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- 27. The <u>Chairman</u> noted that a total grant of \$76 million had been approved for 346 applications, representing an average funding of about \$0.2 million per application. She enquired about the energy savings achieved and the extent of improvement in the energy performance of buildings. <u>PASE(E)</u> advised that funding ranged from \$1,500 to \$2 million per application. The approved projects would lead to a saving in electricity consumption of 47.3 million kWh per annum, which was equivalent to a reduction of 33 100 tonnes of carbon dioxide emissions. At the Chairman's request, the <u>Administration</u> agreed to provide a breakdown on the percentage contribution in the reduction of carbon dioxide emissions from the four types of energy efficient installations.
- 28. Ms Cyd HO suggested that consideration should be given to providing loans to building owners who could not afford the capital cost for EEPs even with the assistance under the Schemes. The loan could be recovered from the savings in electricity from EEPs. PASE(E) agreed to relay Ms HO's suggestion to the ECF Committee for consideration. She added that there were energy consultant companies in the market which would undertake energy efficiency contracts for buildings without requiring owners to pay the capital cost upfront. The cost incurred would be recovered from the energy savings so derived. In this way, the building owners could be able to proceed with EEPs without having to bear the capital cost.

Way forward

29. In response to the Chairman's enquiry on the way forward for the Schemes, <u>PASE(E)</u> said that efforts would be stepped up to promote energy-cum-carbon audits (ECA) as the number of ECA applications were relatively less than that of EEPs. Building owners would be advised that through the conduct of ECA, they would be able to identify measures, such as adjustment/closure of air-conditioning/lift systems at night, to conserve energy without incurring additional cost. The conduct of ECA would also facilitate building owners in planning for EEPs.

VI. Any other business

30. There being no other business, the meeting ended at 4:15 pm.

Council Business Division 1
<u>Legislative Council Secretariat</u>
15 June 2010

Admin