# 立法會 Legislative Council

LC Paper No. CB(1) 966/11-12 (These minutes have been seen by the Administration)

Ref: CB1/PL/EA/1

#### **Panel on Environmental Affairs**

### Minutes of meeting held on Wednesday, 21 December 2011, at 8:30 am in Conference Room 3 of the Legislative Council Complex

**Members present**: Hon CHAN Hak-kan (Chairman)

Hon Audrey EU Yuet-mee, SC, JP (Deputy Chairman)

Hon James TO Kun-sun

Hon WONG Yung-kan, SBS, JP Hon Miriam LAU Kin-yee, GBS, JP

Hon LEE Wing-tat

Hon Jeffrey LAM Kin-fung, GBS, JP Prof Hon Patrick LAU Sau-shing, SBS, JP

Hon KAM Nai-wai, MH Hon Starry LEE Wai-king, JP Hon CHAN Kin-por, JP Hon IP Wai-ming, MH Hon Tanya CHAN

**Members absent**: Hon Andrew CHENG Kar-foo

Hon CHEUNG Hok-ming, GBS, JP

Hon Cyd HO Sau-lan

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)

**Environmental Protection Department** 

Mr MOK Wai-chuen Assistant Director (Air Policy) Environmental Protection Department

Mr PANG Sik-wing
Principal Environmental Protection Officer (Air Policy)
Environmental Protection Department

#### For item V

Dr Kitty POON Under Secretary for the Environment

Mr Carlson K S CHAN
Deputy Director of Environmental Protection (3)
Environmental Protection Department

Mr MOK Wai-chuen Assistant Director (Air Policy) Environmental Protection Department

Mr Edmond HO Principal Environmental Protection Officer (Mobile Source Control) Environmental Protection Department

Clerk in attendance: Miss Becky YU

Chief Council Secretary (1)1

**Staff in attendance** : Mrs Mary TANG

Senior Council Secretary (1)1

Miss Mandy POON Legislative Assistant (1)1

#### <u>Action</u>

#### I. Confirmation of minutes

(LC Paper No. CB(1) 565/11-12 — Minutes of the meeting held on 24 October 2011)

The minutes of the meeting held on 24 October 2011 were confirmed.

#### II. Information paper issued since last meeting

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

#### III. Items for discussion at the next meeting

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(LC Paper No. CB(1) 625/11-12(01) — List of follow-up actions LC Paper No. CB(1) 625/11-12(02) — List of outstanding items for discussion)
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- 3. <u>Members</u> agreed to discuss the following items at the next regular meeting scheduled for Thursday, 19 January 2012, at 8:30 am -
  - (a) Proposal for banning all forms of asbestos; and
  - (b) Municipal Solid Waste Charging.

#### IV. Controlling emissions from vessels

4. The <u>Under Secretary for the Environment</u> (USEN) briefed members on the Administration's proposal to control emissions from vessels to further improve air quality.

#### Controlling emissions of ocean-going vessels at berth

5. Ms Miriam LAU said that the shipping trades supported the use of cleaner vessel fuels to improve air quality and in fact, the Hong Kong Liner Shipping Association had launched a two-year Fair Winds Charter (the Charter) on 1 January 2011 to encourage ocean going vessels (OGVs) to voluntarily switch to use fuel with sulphur content not exceeding 0.5% while at berth in Hong Kong. However, in the absence of financial support from the Administration, it would be difficult for the Charter to continue beyond the two-year period as the shipping business had been on the decline in recent years. Besides, any increase in fuel prices would have a significant impact on the operating costs of OGVs having regard to their high fuel consumption levels. By the same token, the proposal to control emissions from vessels could not be successfully implemented without the assistance from the Administration. Noting that fuel switching was required for OGVs berthing in European Union

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(EU) and certain North American ports, she enquired if the relevant overseas economies had introduced any incentivized programmes to encourage fuel switch at berth.

- USEN responded that the Administration welcomed the signing of the 6. Charter by 17 shipping operators as requiring OGVs to switch to cleaner fuel while at berth was becoming an international trend. To ride on the voluntary act of the shipping industry and to ensure a level playing field to all OGVs in the drive to tackle air pollution, the Administration was exploring with the governments of Guangdong, Shenzhen and Macao on collaborating on a proposal to require OGVs to switch to low-sulphur fuel when berthing in Hong Kong and Pearl River Delta (PRD) waters. It would also discuss with the shipping trades on the means to take forward the proposal and the assistance to The Assistant Director of Environmental Protection (Air Policy) (ADEP(AP)) added that tax incentives were provided by some overseas countries to encourage fuel switch at berth. Ms Miriam LAU stressed that the proposed fuel switch at berth, if implemented, should be on a regional basis. She said that shipping companies would not support the proposal if it was only implemented in Hong Kong lest this would undermine Hong Kong's competitiveness as OGVs might choose not to berth in Hong Kong. that a more in-depth consultation could be held with the relevant trades.
- 7. <u>Mr IP Wai-ming</u> enquired if the 17 signatories to the Charter included Mainland shipping companies. <u>USEN</u> replied that all of them were international carriers involved in the operation of OGVs. To facilitate better understanding, <u>the Administration</u> was requested to provide more information on the Charter, including the number of OGVs equipped to perform fuel switch at berth and their routing.
- 8. While supporting mandatory fuel switch at berth which had become an international trend, Mr KAM Nai-wai pointed out the need to set a definite time frame for the switch to enter into force so that OGVs which failed to comply with the switch would not be allowed berthing in Hong Kong. USEN said that the Administration was well aware of the pollution associated with maritime emissions, particularly at container terminal areas. However, the proposed fuel switch at berth, if implemented, should be on a regional basis. In this connection, the Administration was working closely with the Guangdong authorities on the feasibility of requiring OGVs to switch to low-sulphur fuel while berthing in Hong Kong and PRD waters, but the process would take time as cross-boundary cooperation was required to work out issues such as the fuel standards to be adopted.

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- 9. Mr CHAN Kin-por held the view that most OGVs should have been equipped for fuel switch at berth as this was a common requirement in many parts of EU and the United States. Therefore, OGVs should not have much difficulty in complying with a similar requirement in Hong Kong. Given the impact of emissions from vessels, which was particularly discernable at locations near container terminals where OGVS berthed and places close to their routes, he considered that the mandatory fuel switch at berth should be implemented in Hong Kong first, without awaiting the outcome of discussion with governments of Guangdong, Shenzhen and Macao. Sharing similar views, Ms Audrey EU enquired about the timeframe for implementing the fuel switch at berth, and the penalties for non-compliance with the switch. USEN said that the Administration was exploring with the governments of Guangdong, Shenzhen and Macao on the feasibility of requiring OGVs to switch to low-sulphur fuel while berthing at ports of Hong Kong and PRD because this regional approach would maximize environmental benefits and provide a level-playing field for the ports in the region. The views of the affected trades would be sought on the way forward in implementing the switch. decided that fuel switch at berth should be mandated, there would be a need to provide introduce legislation which would also for penalties non-compliance.
- 10. Mr IP Wai-ming enquired about the lead time for reaching a consensus with the relevant governments on the implementation of fuel switch at berth on a regional basis, and the estimated number of OGVs which would not berth here if Hong Kong unilaterally implemented the fuel switch. USEN said that it would take time for the proposal of requiring OGVs to switch to low-sulphur fuel while berthing in Hong Kong and PRD waters to enter into force as cross-boundary cooperation was required. The proposed setting up of Emission Control Areas in PRD waters would take longer time as this would require approval from the Central Government as well as international maritime authorities. It would be difficult to assess the impact of unilateral fuel switching on Hong Kong.
- 11. Mr WONG Yung-kan enquired if the new cruise terminal would be properly equipped to facilitate the proposed fuel switch at berth. The Chairman was also concerned about the pollution arising from emissions of OGVs berthing in the new cruise terminal at Kai Tak which would be a densely populated area with many housing developments. USEN said that supporting facilities would be put in place at the new cruise terminal to help reduce the impacts of OGVs berthed there. The Deputy Director of Environmental Protection (3) (DDEP(3)) added that fuel switch at berth, if implemented, would also apply to the new cruise terminal. In addition, the new cruise terminal had made provisions for installation of on-shore electricity supply to allow OGVs to switch to electricity when berthing. The international community was now

working on a set of common standards for providing on-shore electricity supply. Once the common standards had been agreed, the cruise terminal could adopt the standards for installing the on-shore electricity supply.

#### Controlling emissions of local vessels

- Ms Miriam LAU noted that the trial on the use of ultra-low sulphur 12. diesel (ULSD), which had a sulphur content not exceeding 0.005%, was conducted by local ferries only. She questioned the feasibility of the proposal of capping the sulphur content of marine light diesel at 0.1%, given the many different kinds of vessels and ships plying within Hong Kong waters, including ferries, fishing vessels, barges and cargo ships etc. USEN said that the trial aimed to ascertain the technical feasibility of local ferries using ULSD, and to collect essential operational data in relation to the fuel switch. During the trial, there were concerns that the lubricity of a fuel might drop with its sulphur In this connection, the Administration had collected samples of ULSD for testing, which showed that their lubricity was comparable to that of the current marine diesel. Besides, domestic vessels in many overseas countries were using 0.1% sulphur or cleaner diesel. Therefore, the switch to 0.1% sulphur diesel, which had a sulphur content higher than ULSD, should pose no technical problem to the engines of local vessels. Nonetheless, the Administration was prepared to conduct a small-scale demonstration trial on the use of 0.1% sulphur diesel for local vessel operators to get first-hand experience of the cleaner fuel.
- 13. Noting that the allowable sulphur content of marine diesel in many overseas countries was between 0.1% and 0.5%, Ms Miriam LAU pointed out the proposal to cap the sulphur content at 0.1% for marine diesel was very stringent. As emission reduction devices could also effectively reduce the sulphur dioxide (SO<sub>2</sub>) emissions from vessels, the trades would prefer to retrofit their vessels with these devices on a one-off basis rather than switching to the more costly cleaner fuel on a recurrent basis. The Chairman enquired about the effectiveness of emission reduction devices in reducing emissions and how these compared with the switch to low sulphur fuel. DDEP(3) said that the Administration had an open mind on the retrofitting of emission reduction devices if these were proven to be effective in improving the emission use of scrubbers to reduce SO<sub>2</sub> emissions from ferries. A tertiary institution was further developing such scrubbers. Star Ferry or other local ferry operators could seek funding from the Pilot Green Transport Fund to test such devices on their ferries.

- 14. Mr WONG Yung-kan said that the fishing industry had been facing much difficulty in meeting the new requirements on emission performance of fishing vessels. There was a need for the Administration to provide assistance to the fishing trades, in line with those provided to the land transport trades. Noting that the Hong Kong Electric Company was assisting fishermen in the installation of photovoltaic lighting systems in their fishing vessels, he enquired if the Administration was prepared to subsidize such installation. He also enquired if fishing vessels would be included in the upcoming trial on the use of Mr CHAN Kin-por echoed that incentives, such as 0.1% sulphur diesel. concessions for cleaner fuels and subsidies for replacement of polluting vessels with cleaner models, should be provided to local fishermen. Their views were shared by Mr IP Wai-ming. USEN said that stakeholders, including the fishing trades, would be consulted on the proposals on control of emissions of marine vessels. The practicability of using 0.1% sulphur diesel by fishing vessels would be considered in the small-scale demonstration trial.
- 15. Mr KAM Nai-wai opined that the Administration had been overly concerned about the trades' reactions and as a result, the implementation of many needed measures to improve air quality had been procrastinated. view of the increase in emissions as a result of increase in maritime activities, there was an imminent need for control of emissions from the marine sector to improve air quality, particularly at berthing areas. He was disappointed to learn that the Administration had to carry out another small-scale demonstration trial after the completion of the trial of using ULSD by local ferries. enquired about the definite time frame for upgrading the standard for local marine fuel supply. USEN said that the trial of using ULSD was conducted on domestic ferries and the participating ferries contained a mix of different engine models, engine capacity, vessel features and service modes. The small-scale demonstration trial was to ascertain the use of 0.1% sulphur diesel on different She agreed to the need to expedite the types of domestic vessels. demonstration trial and the consultation with the trades on the time frame for upgrading the standard for local marine fuel supply to enable early improvements to air quality.

#### **Cost implications**

16. Mr IP Wai-ming said that the seaman union of Hong Kong Federation of Trade Unions had expressed concern about the cost implications of the proposed fuel switch at berth, particularly at a time when the shipping industry was facing financial hardship. There was a need for the Administration to provide financial incentives to encourage the switch. USEN said that some operational data would be required before deciding on the need for financial assistance to encourage the switch. Since the fuel switch at berth was becoming an international trend, OGVs would need to comply with the requirements if they

berthed in overseas ports.

- 17. Ms Miriam LAU sought the Administration's clarification on the Star Ferry Company's comment on the trial of using ULSD by local ferries that if ULSD was only applied to local vessels, a logistic overhead cost would be incurred which in turn would increase the fuel price differential, thereby raising the operating cost and imposing pressure on fare (for the case of ferry services). Given that local ferry companies had been operating under a deficit, the switch to cleaner fuels would further undermine their financial viability. Her views were shared by Ms Audrey EU. USEN said that the proposal to mandate the standard for marine light diesel sold in Hong Kong would help obviate any extra handling cost that oil companies might otherwise incur. Therefore, any price adjustment should merely reflect the import price differential between 0.1% shulphur diesel and the current marine light diesel (maximum 0.5% Since the cost difference between these two fuels was only around HK\$0.02 per litre on average, the proposal should not bring about any major changes to the retail price of marine light diesel.
- 18. In concluding, the <u>Chairman</u> said that members generally supported the proposals to control emissions from vessels. However, there was a need for the Administration to provide financial incentives to encourage the fuel switch, particularly when the shipping industries were facing difficult times. Given the high fuel consumption of vessels, any increase in fuel charges would have serious implications on operating coasts.

# V. Tightening emission standards of newly registered motor vehicles to Euro V level

(LC Paper No. CB(1) 625/11-12(04) — Administration's paper on Tightening emission standards of newly registered motor vehicles to Euro V level

LC Paper No. CB(1) 625/11-12(05) — Paper on tightening emission standards of newly registered vehicles to Euro V level prepared by the Legislative Council Secretariat (background

brief))

19. <u>USEN</u> briefed members on the Administration's proposal to tighten the statutory emission standards for newly registered vehicles to Euro V level starting from 1 June 2012 to further improve our roadside air quality.

- 20. Ms Miriam LAU noted that the Right Hand Drive Motor Association (Hong Kong) Limited (RHDA), comprising representatives of parallel importers, had requested for a six-month transitional period to allow sufficient time to clear their stocks and to deliver orders which had been placed before the tightening of emission standards. ADEP(AP) said that the proposed tightening of emission standards for all newly registered motor vehicles to Euro V level, if implemented, would only take effect on 1 June 2012 which would allow sufficient lead time for second-hand private car importers to clear their stock and adjust their procurement and marketing strategy. The requested provision of a six-month transitional period might encourage the import of non-compliant vehicles during the period. The Administration would discuss with the trades' associations to address their concerns.
- Mr Jeffrey LAM supported the proposed tightening of emission 21. He hoped that the proposal together with other measures being contemplated, including the provision of one-off subsidy for owners of liquefied petroleum gas (LPG) taxis and light buses to replace the catalytic converters in their vehicles, could further improve roadside air quality. He added that to promote the use of environment-friendly vehicles in Hong Kong, there was a need to enhance the maintenance and repair standard through provision of Efforts should also be made to expedite the provision of proper training. supporting infrastructure, including charging facilities in car parks for electric vehicles. USEN said that the Administration had been encouraging the vehicle industry to make available maintenance and repair information on their vehicles, including environment-friendly vehicles. At present, charging facilities were made available in some Government and private car parks. With more electric vehicles running on the roads, more charging facilities would be provided.
- 22. <u>Ms Audrey EU</u> enquired if there was a comparison on the cost-effectiveness of electric, hybrid and Euro V vehicles, and whether efforts would be made to encourage early replacement of polluting vehicles with environment-friendly ones. She opined that the cost comparison would facilitate purchasers in making informed decisions when replacing their vehicles. <u>USEN</u> said that the cost of environment-friendly vehicles varied with the model and type of vehicle. The selling prices of environment friendly-vehicles were readily available from car dealers.
- 23. Given the lukewarm response to the incentive schemes to encourage early replacement of polluting vehicles, <u>Miss Tanya CHAN</u> asked if the Administration had endeavoured to find out the reasons why vehicle owners were reluctant to make use of these schemes, and whether other measures were being contemplated to further encourage early replacement of polluting vehicles. In addition to financial incentives, Members belonging to the Civic Party had suggested the introduction of financial disincentives to discourage owners to

continue using their aged vehicles. Mr CHAN Kin-por agreed that subject to consultation, the use of disincentives (such as increasing the licence fees of commercial vehicles aged 20 or above) could be a possible option to discourage continued ownership of aged and polluting vehicles. Consideration could also be given for the Administration to buy out these vehicles so that they could be permanently removed from the roads. Ms Miriam LAU said that she had written a letter to the Secretary for the Environment (copied to the Secretary for Financial Services and the Treasury as well as the Secretary for Transport and Housing) requesting for tax rebate for scrapping of vehicles aged 10 years or less, with a view to effectively reducing the number of aged and polluting vehicles on the roads. Similar tax incentives were adopted in Singapore, Japan and Taiwan.

- 24. <u>USEN</u> said that Ms Miriam LAU's proposal was being studied by the Administration. She added that the one-off grant to encourage early replacement Euro II diesel commercial vehicles was still ongoing, and hence it might be more appropriate for the programme to take its course before deciding on the need for disincentives to discourage owners from using aged vehicles. In fact, the Administration had earlier proposed to increase the licence fees of old commercial vehicles to accelerate their replacement, but the proposal did not have the support of members. Notwithstanding, the Administration would continue to look into the need for disincentives to deter continued ownership of polluting vehicles with members' support.
- Ms Audrey EU enquired if the proposed roadside remote sensing 25. equipment to monitor emission of petrol and LPG vehicles at roadside could also be used to screen out other vehicles with excessive emissions. said that petrol and LPG vehicles that lacked proper maintenance were a major source of roadside nitrogen dioxide emissions. These vehicles relied on catalytic converters to reduce emissions, but the latter would be worn out over use and needed to be replaced from time to time. If owners did not replace the worn out catalytic converters, the emission of their vehicles would increase The use of roadside remote sensing equipment would be very immenselv. effective in screening out vehicles with excessive emissions. identification of these vehicles and subsequent replacement with catalytic converters could help reduce nitrogen dioxide emissions by as much as 90%. Before using the roadside remote sensing equipment, the Administration would provide a one-off subsidy to help owners of LPG taxis and light buses to replace their catalytic converters.
- 26. <u>Mr Jeffrey LAM</u> enquired about the progress of the trial on retrofitting selective catalytic reduction (SCR) devices in Euro II and III franchised buses. <u>ADEP(AP)</u> said that SCR devices would be retrofitted in six buses in the first phase of the trial. The trial on three buses had commenced since

September 2011 and the initial results were positive. The trial on the remaining three buses would commence shortly. It was expected that by mid 2012, the Administration was able to report to the Panel on the initial findings of the trial.

- Mr WONG Yung-kan supported that more researches should be conducted on new technologies for green transport. He noted that the Hong Kong Productivity Council (HKPC) and public light bus (PLB) associations conducted trials on the means to reduce vehicular emissions in 2010. He enquired about the progress of trials, and whether the Administration had provided any assistance to the PLB trades to reduce vehicular emissions. ADEP(AP) said that funding from the Pilot Green Transport Fund could be sought on the trial of new transport technologies. With the support of PLB operators, HKPC was developing a hybrid light bus. When its effort bore fruits, the light bus trade could apply for the Pilot Green Transport Fund to try out the hybrid light bus on a wider scale.
- Ms Audrey EU said that the emission problem of PLB could be easily solved if the Administration acceded to the PLB trades' request to increase the passenger capacity of PLBs to 20 seats. This would not only ensure replacement of the more polluting PLBs with compliant models, but also ease the pressure of fare increase. It was regretted that despite support from the community at large, the Administration had declined the request due to objection from the taxi trades. <u>USEN</u> said that the question of increasing the passenger capacity of PLBs fell under the transport policy. She would relay Ms EU's views to the Transport and Housing Bureau for consideration.

## VI. Any other business

29. There being no other business, the meeting ended at 10:08 am.

Council Business Division 1
<u>Legislative Council Secretariat</u>
1 February 2012