

**立法會**  
**Legislative Council**

LC Paper No. CB(1)396/19-20  
(These minutes have been seen  
by the Administration)

Ref : CB1/PL/EA

**Panel on Environmental Affairs**

**Minutes of meeting**  
**held on Monday, 16 December 2019, at 8:30 am**  
**in Conference Room 3 of the Legislative Council Complex**

**Members present** : Dr Hon Junius HO Kwan-yiu, JP (Chairman)  
Hon CHAN Hak-kan, BBS, JP  
Dr Hon Priscilla LEUNG Mei-fun, SBS, JP  
Hon Frankie YICK Chi-ming, SBS, JP  
Hon CHAN Chi-chuen  
Hon Kenneth LEUNG  
Hon KWOK Wai-keung, JP  
Hon Dennis KWOK Wing-hang  
Hon Elizabeth QUAT, BBS, JP  
Ir Dr Hon LO Wai-kwok, SBS, MH, JP  
Hon CHU Hoi-dick  
Hon SHIU Ka-fai, JP  
Hon YUNG Hoi-yan, JP  
Hon Tanya CHAN  
Hon Kenneth LAU Ip-keung, BBS, MH, JP  
Hon Tony TSE Wai-chuen, BBS

**Members absent** : Hon Steven HO Chun-yin, BBS (Deputy Chairman)  
Hon Mrs Regina IP LAU Suk-ye, GBS, JP  
Hon WU Chi-wai, MH  
Hon HUI Chi-fung

Action

**Public Officers  
attending : For item IV**

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

Mr Owin FUNG  
Deputy Director of Environmental Protection (3)  
Environmental Protection Department

Mr Dave HO, JP  
Assistant Director (Air Policy)  
Environmental Protection Department

Mr Brian LAU  
Principal Environmental Protection Officer  
(Air Policy)  
Environmental Protection Department

Dr Kenneth LEUNG  
Principal Environmental Protection Officer  
(Air Science)  
Environmental Protection Department

Dr MAK Shing-tat  
Principal Environmental Protection Officer  
(Mobile Source)  
Environmental Protection Department

**For item V**

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

Mr Owin FUNG  
Deputy Director of Environmental Protection (3)  
Environmental Protection Department

Mr Francis CHENG  
Assistant Director (Cross-Boundary and International)  
Environmental Protection Department

Mr Dave HO, JP  
Assistant Director (Air Policy)  
Environmental Protection Department

Action

Mr Brian LAU  
Principal Environmental Protection Officer  
(Air Policy)  
Environmental Protection Department

Dr Kenneth LEUNG  
Principal Environmental Protection Officer  
(Air Science)  
Environmental Protection Department

Mr Daniel TANG  
Principal Environmental Protection Officer  
(Cross-Boundary and International)  
Environmental Protection Department

Dr MAK Shing-tat  
Principal Environmental Protection Officer  
(Mobile Source)  
Environmental Protection Department

**Clerk in attendance :** Ms Angel SHEK  
Chief Council Secretary (1)1

**Staff in attendance :** Mr Jason KONG  
Senior Council Secretary (1)1

Miss Bowie LAM  
Council Secretary (1)1

Miss Mandy POON  
Legislative Assistant (1)1

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Action

**I. Confirmation of minutes**

(LC Paper No. CB(1)251/ — Minutes of the policy briefing-cum-  
19-20 meeting held on 28 October 2019)

The minutes of the policy briefing-cum-meeting held on 28 October 2019 were confirmed.

Action

**II. Information papers issued since last meeting**

2. Members noted that no information paper had been issued since the last meeting.

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

(LC Paper No. CB(1)233/ — List of follow-up actions  
19-20(01)

LC Paper No. CB(1)233/ — List of outstanding items for  
19-20(02) discussion)

3. Members agreed to discuss the following items, which were proposed by the Administration, at the next regular meeting scheduled for Wednesday, 22 January 2020, at 2:30 pm:

- (a) further measures to improve air quality (part 2); and
- (b) creation of a permanent directorate post (Chief Building Services Engineer) to oversee district cooling system projects.

4. The Chairman referred members to the letter from Mr CHAN Hak-kan tabled at the meeting. Mr CHAN suggested in the letter that the Panel meet with deputations to receive public views on the Administration's measures to promote the use of electric vehicles ("EVs"). The Chairman consulted members on whether the duration of the regular meeting in January 2020 should be extended for incorporating an additional agenda item for the above purpose. Members did not object to the Chairman's proposal.

*(Post-meeting note: The letter from Mr CHAN Hak-kan was issued to members on 16 December 2019, vide LC Paper No. CB(1)264/19-20(01).)*

**IV. Overall strategy for improving air quality**

(LC Paper No. CB(1)233/ — Administration's paper on "Overall  
19-20(03) strategy for improving air quality"

LC Paper No. CB(1)233/ — Updated background brief on  
19-20(04) "Review of Air Quality Objectives"

Action

prepared by the Legislative Council  
Secretariat

LC Paper No. CB(1)254/ — Submission from Blue Skies China  
19-20(01) (English version only)

Briefing by the Administration

5. With the aid of a PowerPoint presentation, the Under Secretary for the Environment ("USEN") briefed the Panel on the progress of improving local and regional air quality, major air quality-related measures for meeting the challenges ahead, and the findings of a recent public consultation relating to the review of the Air Quality Objectives ("AQOs").

6. As there had been public concern that dioxins might be formed during the high-temperature dispersion of 2-chlorobenzalmalononitrile (commonly known as "CS"), a key component of tear gas, USEN took the opportunity to brief members on the ambient concentrations and common emission sources of dioxins. In recent years, the ambient concentrations of dioxins measured at the Central/Western and Tsuen Wan monitoring stations were on a decreasing trend, and significantly lower than the 24-hour ambient air quality criterion for dioxins developed by the authorities of Ontario, Canada (which was the most stringent standard for ambient dioxins concentration in the world at present). USEN explained that dioxins were usually formed by the burning of chlorine-containing materials. Although CS contained chlorine molecules, it was only briefly exposed to high temperature after a tear gas projectile was launched. According to some studies conducted by overseas institutions, no dioxins could be detected under the thermal reaction of CS. Samples collected by the Environmental Protection Department ("EPD") and the Chinese University of Hong Kong also confirmed that the use of tear gas in recent months had not resulted in an abnormal elevation of ambient dioxins concentrations, and the recorded concentrations were still below the safety level by large margins. A list of literature on emission sources of dioxins and thermal decomposition of CS was included in the PowerPoint presentation materials for members' reference.

*(Post-meeting note: The PowerPoint presentation materials were circulated to members on 16 December 2019, vide LC Paper No. CB(1)260/19-20(01).)*

Action

Discussion

*Reducing vehicular emissions*

7. Mr Frankie YICK and Ms Elizabeth QUAT said that they supported the general direction of the Administration's strategy for improving air quality. Mr YICK called on the Administration to ensure that there would be diverse choices of compliant vehicles before further tightening the emission standards for first-registered vehicles, so as to minimize the economic impact of the initiative on the transport trades.

8. Mr SHIU Ka-fai said that the trades generally welcomed the extension of the application deadline for ex-gratia payment for Euro III diesel commercial vehicles ("DCVs") under the incentive-cum-regulatory programme to phase out pre-Euro IV DCVs ("the pre-Euro IV programme"). He considered that the Administration should announce the implementation timetable for the programme to phase out Euro IV DCVs ("the Euro IV programme") as early as possible, so that the automotive trade could make timely preparations.

9. USEN responded that the Administration endeavoured to launch the Euro IV programme expeditiously in 2020, but the actual implementation timetable would be subject to the timing of approval of the relevant financial proposal by the Legislative Council. The Administration would brief the Panel on the programme details at the next meeting. Referring to the concern that Mr SHIU Ka-fai raised at the Panel meeting on 28 October 2019, USEN said that the extension of the ex-gratia payment application deadline under the pre-Euro IV programme would narrow or even close the gap between the implementation schedules of the two programmes, thereby helping reduce the impact of the expiry of the pre-Euro IV programme on the vehicle repair trade.

10. Mr CHU Hoi-dick expressed concern that the continued rapid growth of the number of private cars and the expected surge in cross-boundary vehicular traffic after the completion of Tuen Mun-Chek Lap Kok Link ("TM-CLKL") would undermine EPD's efforts in reducing vehicular emissions. He asked how the Administration would contain the volume of vehicular traffic in order to control roadside air pollution.

11. Mr Frankie YICK considered that the Administration should step up efforts to combat illegal carriage of passengers for reward, as the touting for business by such vehicles on the roads might have led to an increase in the volume of vehicular traffic and exacerbated roadside air pollution. He asked whether the Administration had been keeping statistics on vehicular flows on public roads.

Action

12. USEN advised that EPD had close communication with the Transport and Housing Bureau ("THB") and the Transport Department ("TD") in controlling private car growth and other measures for reducing vehicular emissions. THB/TD also conducted studies on relevant subjects from time to time. It was noteworthy that with the implementation of various measures to reduce vehicular emissions, there had been significant improvement in roadside air quality in the past years despite the growth in the number of private cars. The traffic and environmental implications of major infrastructure projects, including TM-CLKL and the Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road, had been taken into account in the relevant environmental impact assessments. The Assistant Director (Air Policy) ("AD(AP)") advised that TD had been keeping statistics on vehicular flows of roads and tunnels, and releasing them for public reference regularly.

*Reducing marine emissions*

13. Mr Frankie YICK and Ms Elizabeth QUAT expressed support for the introduction of a pilot scheme on new energy ferries, and asked about other new measures to be launched for reducing marine emissions. As it was technically and financially difficult for small-scale operators of local vessels (such as work boats and fishing vessels) to upgrade the engines of such vessels, and the operators might not be eligible for funding support under the Pilot Green Transport Fund ("PGTF"), the two members considered that the Administration should explore ways to assist the operators in improving the environmental performance of their vessels. Ms QUAT added that the Democratic Alliance for the Betterment and Progress of Hong Kong ("DAB") had suggested the introduction of a new subsidy scheme for the purpose.

14. AD(AP) responded that through controlling the sulphur content of locally-supplied marine light diesel, the Administration had been mandating the use of cleaner fuels to reduce marine emissions. Ferry operators could apply for subsidies under PGTF for testing of engines using green and innovative technologies. USEN advised that the Administration would explore ways to encourage small-scale operators to improve the environmental performance of their vessels, and would discuss the issue with relevant stakeholders.

*Regional collaboration*

15. Ir Dr LO Wai-kwok asked about the Administration's collaboration with the authorities of cities in the Pearl River Delta ("PRD") region and the Guangdong-Hong Kong-Macao Greater Bay Area to improve regional air quality. He sought clarification on how the diagrams on the concentrations of fine suspended particulates ("PM2.5") in the PRD region from 2003 to 2018

Action

shown on page 4 of the Administration's PowerPoint presentation materials (LC Paper No. CB(1)260/19-20(01)) should be interpreted.

16. Expressing concern about the impact of the emissions from cross-boundary vehicles on local air quality, Mr CHAN Chi-chuen enquired about the progress of the Mainland authorities in controlling vehicular emissions.

17. AD(AP) responded that:

- (a) the said diagrams showed the average annual concentrations of PM2.5, and they were derived from daily satellite data by The Hong Kong University of Science and Technology;
- (b) the Administration's collaboration with the Guangdong authorities to improve air quality in the PRD region dated back to the 1990's. In 2002, the two sides reached a consensus on implementing a joint Pearl River Delta Regional Air Quality Management Plan and setting emission reduction targets up to 2010 for four major air pollutants. The emission reduction targets were reviewed and updated thereafter from time to time, with the latest targets set at 2020. In addition, the Pearl River Delta Regional Air Quality Monitoring Network commenced operation in 2006;
- (c) the emission reduction measures implemented by Hong Kong, in its efforts to achieve the above targets, were mainly aimed at the electricity sector, vehicular emissions and marine emissions;
- (d) the key emission reduction measures implemented by Guangdong included (i) increasing the use of natural gas for electricity generation, phasing out old coal-fired power plants, and installing emission reduction devices in some coal-fired generating units; (ii) phasing out highly polluting factories; (iii) progressively implementing tighter emission standards for motor vehicles, with the latest standards set at National VI, which were equivalent to the Euro VI standards being implemented in Hong Kong; and (iv) mandating the use of marine fuel with sulphur content not exceeding 0.5% by ocean-going vessels; and
- (e) from 2006 to 2018, sulphur dioxide and respirable suspended particulates ("PM10") levels measured by the Pearl River Delta Regional Air Quality Monitoring Network had been reduced by over 80% and about 36% respectively.



Action

18. Mr Kenneth LEUNG sought details on regional collaboration to tackle the problem of ozone ("O<sub>3</sub>") pollution. USEN explained that, like many other places in the world, the easing of the photochemical smog problem in the PRD region and Hong Kong was followed by an increase in O<sub>3</sub> level. O<sub>3</sub> was not directly emitted from air pollution sources but was formed by photochemical reactions of nitrogen oxides ("NO<sub>x</sub>") and volatile organic compounds ("VOCs") in the atmosphere, which were emitted from many different pollution sources in the region. To tackle the problem of O<sub>3</sub> pollution, the Administration would continue to collaborate with the Guangdong authorities to reduce NO<sub>x</sub> and VOC emissions. The two sides had plans to jointly conduct a study to identify the key VOCs contributing to O<sub>3</sub> formation in the PRD region, which would facilitate the formulation of targeted emission reduction measures.

19. Ms Elizabeth QUAT suggested that the Administration should explore with the Guangdong authorities the establishment of a unified mechanism for disseminating forewarning information about regional air pollution and related health risks.

20. USEN responded that the Administration was discussing with the Guangdong authorities the development of a unified air quality alert system. Meanwhile, air quality information obtained by the Pearl River Delta Regional Air Quality Monitoring Network was published on the Internet for public reference on an hourly basis.

*Ambient dioxins concentrations*

21. Mr CHAN Chi-chuen noted from page 11 of LC Paper No. CB(1)260/19-20(01) that the dioxins level at the Central/Western monitoring station in November 2019 was proportionally much higher than the levels in October 2019 and November 2018. He asked whether the spike was attributed to the use of tear gas, and if so, what follow-up actions had been taken by the Administration to safeguard the environment and public health. He considered that EPD should study the chemical composition of tear gas used in Hong Kong and the environmental impact of tear gas residues.

22. USEN responded that:

- (a) dioxins levels in Hong Kong, measured by two monitoring stations, varied with the prevailing wind directions in different seasons. As shown in page 11 of LC Paper No. CB(1)260/19-20(01), the levels in winter were higher than those in summer, and the levels from June to October 2019 remained close to the lower detection limit;

Action

- (b) dioxins tended to persist in the environment once formed. The low levels of ambient dioxins measured in the past few months indicated that the amount of dioxins produced during the social events in recent months (either from the demonstrators' actions or tear gas projectiles) was minimal, if not none, and the effect on ambient dioxins concentrations was insignificant compared with the seasonal factors;
- (c) page 18 of LC Paper No. CB(1)260/19-20(01) contained a graphical analysis of the impacts of tear gas and open burning of materials on air quality, using PM2.5 readings (CS was a form of particulates) taken on 13 and 14 November 2019. As shown in the graph, during the two periods when tear gas projectiles were launched near the monitoring station in Mong Kok, there were no significant changes to the ambient concentrations of PM2.5. In contrast, the PM2.5 level surged when a switch box near the monitoring station was burning. The data suggested that open burning of materials caused much more air pollution than the use of tear gas; and
- (d) the half-life of CS was about four and a half days in the environment, and could be shortened to about 14 minutes when dissolved in water. In general, CS residues on surfaces could be effectively removed by using soapy water. According to an expert whom USEN consulted, soapy water (or solutions with detergents) was preferable to pure water for cleaning CS residues, as some residues might be contained in a hydrophobic solvent. The Department of Health and the Food and Environmental Hygiene Department ("FEHD") had both issued guidelines on cleaning tear gas residues for public reference.

23. Mr CHU Hoi-dick noted that the operators of a street washing vehicle used high water pressure to clean Nathan Road in the morning of the day of this Panel meeting, which might result in the dispersion of irritating tear gas residues. He asked whether the Administration would consider hiring specialist contractors (such as licensed chemical waste collectors) for the removal of tear gas residues at public places.

24. The Chairman enquired whether training provided to FEHD's employees and staff of its cleansing service contractors was sufficient. Ms Elizabeth QUAT asked about the steps that residents affected by open burning activities could take to protect their own health.

Action

25. USEN responded that it was stated in FEHD's guidelines that when cleaning chemical residues, cleaning workers should wear proper personal protective equipment. If a public place being cleaned was suspected of having chemical residues, tools such as high-pressure water jet should not be used lest the residues disperse. The cleaning of tear gas residues at public places was not a complicated task, and was not expected to cause any harm to the cleaning workers involved or passers-by, provided that FEHD's guidelines were followed. The Administration therefore did not consider it necessary to engage specialists for the task. Unlike CS, residues from open burning of materials were usually not irritating. They could be removed using normal cleaning methods. As regards the incident mentioned by Mr CHU Hoi-dick, USEN would refer it to FEHD for taking follow-up action as appropriate.

26. Mr SHIU Ka-fai and the Chairman suggested that the Administration should disseminate information on ambient concentrations and major emission sources of dioxins, research findings on thermal decomposition of CS, etc., to allay public concern about the environmental impact of tear gas residues. USEN advised that the Administration would disseminate such information.

27. Ir Dr LO Wai-kwok asked about the construction progress of the Integrated Waste Management Facilities ("IWMF"), which would recover energy and useful resources from municipal solid waste using a modern incineration technology; and how the dioxins emission from IWMF would be controlled.

28. USEN responded that the IWMF project was being implemented in phases. The relevant reclamation works near Shek Kwu Chau had commenced recently, and it was expected that Phase 1 of IWMF could be fully commissioned by 2024 or 2025. Dioxins were generally formed at temperatures between 250 °C and 600 °C, and would start to decompose at a temperature of over 600 °C. In the furnace of IWMF, waste would be combusted at a temperature of close to 1 000 °C and the exhaust gas would be cooled rapidly within two seconds to prevent the formation of dioxins. This treatment process had been internationally recognized as being effective in controlling dioxins emissions.

*Review of Air Quality Objectives*

29. Mr Dennis KWOK considered that a provision should be added to the Air Pollution Control Ordinance (Cap. 311) ("APCO") to the effect that protection of public health would take priority over other considerations during each review of AQOs. He questioned the rationale behind the Administration's decision to maintain the proposal of increasing the number of annual allowable

Action

exceedances for the 24-hour AQO for PM<sub>2.5</sub>, despite the objections raised by many members of the public. In addition, he opined that the air quality data of Tung Chung in 2012 presented by the Administration at the Panel meeting on 25 March 2019 could hardly reflect the latest situation and justify the above proposal.

30. USEN responded that:

- (a) the World Health Organization ("WHO") had promulgated a set of Air Quality Guidelines ("AQGs") and Interim Targets ("ITs") for various key air pollutants. WHO encouraged governments to progressively improve air quality through setting their air quality standards at the IT levels and implementing suitable measures having regard to their local circumstances, with a view to meeting AQGs ultimately;
- (b) Hong Kong's air quality management policy was to achieve WHO's AQGs in the long run to protect public health, through introducing a range of measures to reduce emissions. The periodic reviews and tightening of AQOs, which served to take forward interim goals for achieving AQGs progressively, was a key plank of the policy. The process also enabled the evaluation of the effectiveness of implemented measures in reducing emissions, and ensured that the requirements and levels of air pollution control on future designated projects under the Environmental Impact Assessment Ordinance (Cap. 499) ("EIAO") and specified processes under APCO were strengthened correspondingly;
- (c) to ascertain whether it was practicable to tighten the various AQOs, the Administration conducted an air quality assessment for 2025, which was based on the outcome of territory-wide air quality modelling, projected emission reductions arising from the implementation of ongoing and committed measures, etc. According to the assessment results, if the 24-hour AQO for PM<sub>2.5</sub> was to be tightened from the current IT-1 level to IT-2 level, the annual number of exceedances (which were expected to be mainly caused by uncontrollable factors including regional influence and unfavourable weather conditions) would be increased. Therefore, the tightened AQO would not be met unless there was a corresponding adjustment to the number of allowable exceedances; and
- (d) the Administration conducted a public consultation in July to October 2019 on the proposed tightening of AQOs. Although

Action

about a quarter of the respondents did not support the proposed adjustment to the number of allowable exceedances, the Administration considered that it would be in the public interest to take the proposal forward instead of maintaining the status quo. Meanwhile, the Administration would expedite the next review of AQOs.

Motion

31. The Chairman referred members to the following motion moved by Mr Dennis KWOK:

"本委員會早前通過動議，要求政府以保障市民健康為修改空氣質素指標的首要目標，取消放寬微細懸浮粒子(PM2.5)24小時平均濃度的超標次數至35次的建議，並同時收緊可吸入懸浮粒子(PM10)及臭氧的空氣質素指標，惟當局未有措施積極改善及落實有關動議。本委員會表示遺憾。

本委員會促請政府當局積極回應本委員會的意見，同時要求當局在下次指標檢討週期(2019-2023)將因空氣污染物超標而需要付上法律或行政責任的問責機制列入檢討範圍，及在《空氣污染管制條例》中，明確加入以保障公眾健康為首要目標的條文和相關權責，以顯示政府重視市民健康的決心。"

(Translation)

"This Panel had passed a motion earlier requesting the Government to make protecting public health the primary objective of revising AQOs, withdraw the proposal of relaxing the allowable exceedances for 24-hour average concentration of PM2.5 to 35 times, and tighten the AQOs for PM10 and O<sub>3</sub> at the same time, but the Administration had not put in place any measure to proactively improve the situation and implement the motion. This Panel expresses regret.

This Panel urges the Administration to proactively respond to its views, and at the same time requests the Administration to include in the scope of review in the next AQOs review cycle (2019-2023) an accountability mechanism through which air pollutant exceedances will give rise to legal or executive responsibilities, and expressly add to APCO provisions to make protecting public health the primary objective as well as relevant powers and responsibilities, in order to demonstrate the Government's commitment to attaching importance to public health."

Action

32. The Chairman considered that the motion was directly related to the agenda item and members raised no objection to dealing with it. The Chairman invited Mr Dennis KWOK to introduce the motion. Mr KWOK remarked that during the scrutiny of the Air Pollution Control (Amendment) Bill 2013 (which was enacted as the Air Pollution Control (Amendment) Ordinance 2013 to update the then AQOs), there were debates on whether the words "public health" should be adopted in the bill and whether protection of public health should be treated as a factor of paramount importance during each review of AQOs. Although a related amendment he moved to the bill was not passed, he considered that the issues in question should be revisited given that the progress of tightening AQOs had fallen short of public expectations.

33. Mr Kenneth LEUNG expressed support for the motion and agreed that the accountability mechanism in relation to air pollutant exceedances should be reviewed. He considered that more accurate measurement of air pollutant emissions from different sources should be taken, so that the violators could be identified and suitably penalized. He also urged EPD to act on the recommendations of the Audit Commission made in 2012 on achieving AQOs.

34. Dr Priscilla LEUNG said that it might be technically difficult to quantify the effect of air quality improvement measures on public health. She sought information on the follow-up actions taken by Administration in response to the motion passed by the Panel on 25 March 2019, which requested the Administration to, among other things, withdraw the proposal of increasing the number of allowable exceedances for the 24-hour AQO for PM<sub>2.5</sub> and tighten the AQOs for PM<sub>10</sub> and O<sub>3</sub>.

35. Mr Frankie YICK said that the business sector generally welcomed the adoption of a progressive approach to improving air quality. However, if protection of public health took priority over all other considerations during a review of AQOs, problems about the financial viability of air quality improvement measures would arise.

36. The Chairman suggested that Mr Dennis KWOK elaborate on the meanings of "legal or executive responsibilities" and "accountability mechanism" mentioned in the motion, including whether they referred to the existing provisions of relevant legislation.

37. In response to members' views and questions above, USEN emphasized that Hong Kong's air quality management policy aimed to protect public health, and the Administration's approach to the setting and review of AQOs was in strict accordance with the guidelines promulgated by WHO. Legal and executive responsibilities in relation to air pollutant exceedances had been

Action

clearly provided for in relevant legislation. For example, EIAO prohibited the carrying out of a designated project without an environmental permit, and stipulated the conditions for the issue of an environmental permit; and emission limits in respect of power plants, first-registered vehicles, etc., were set out in relevant legislation or instruments. The emission-related statutory requirements were strictly enforced to ensure ongoing compliance. The deployment of remote sensing equipment to identify vehicles with excessive emissions was a case in point. As regards the Panel's request in March 2019 to tighten the AQOs for PM<sub>2.5</sub>, PM<sub>10</sub> and O<sub>3</sub> to more stringent levels, USEN reiterated that the Administration would expedite the next review of AQOs.

38. Speaking in reply on his motion, Mr Dennis KWOK said that better protection of public health could lead to a win-win situation for all, including the business sector. He also remarked that currently, members of the public could not take legal action against the Government for the latter's failing to meet AQOs. He therefore considered it necessary to conduct a review of the legal and executive responsibilities in relation to air pollutant exceedances stipulated in relevant legislation.

39. The Chairman put the motion to vote. At members' request, the Chairman ordered a division. Three members voted for and two voted against the motion, and two members abstained. The Chairman declared that the motion was carried. The votes of individual members were as follows:

*For:*

Mr Kenneth LEUNG  
Ms Tanya CHAN  
(3 members)

Mr Dennis KWOK

*Against:*

Mr Frankie YICK  
(2 members)

Ir Dr LO Wai-kwok

*Abstain:*

Dr Priscilla LEUNG  
(2 members)

Ms Elizabeth QUAT

*(Post-meeting note: The wording of the motion passed was issued to members on 17 December 2019, vide LC Paper No. CB(1)265/19-20(01).)*

Action

**V. Further measures to improve air quality (part 1)**

(LC Paper No. CB(1)233/19-20(05) — Administration's paper on "Further Measures to Improve Air Quality (Part 1)"

LC Paper No. CB(1)233/19-20(06) — Background brief on "Measures to improve air quality" prepared by the Legislative Council Secretariat)

Promoting use of electric vehicles

40. Mr Kenneth LEUNG pointed out that after the Administration had announced the proposed introduction of a pilot scheme of \$2 billion to subsidize the installation of EV charging-enabling infrastructure in car parks of existing private residential buildings, many owners' corporations ("OCs") of residential buildings halted their original plans to install such infrastructure in their buildings to avoid missing out on the subsidies. He urged the Administration to launch the pilot scheme expeditiously so as to restore the momentum of car park upgrades, and asked whether the Administration would consider calling for and vetting applications for subsidies in advance pending the finalization of the scheme.

41. AD(AP) responded that the subsidy scope, administration process, etc., of the proposed pilot scheme were complicated and required careful consideration. The Administration had been consulting stakeholders to refine the scheme's details. It was expected that the scheme could be launched in the second half of 2020 the earliest. As the original plans of OCs of residential buildings for carrying out modification works might not be in line with the finalized requirements of the scheme, the Administration did not consider it practicable to conduct advance vetting and approval of applications.

42. Ms Elizabeth QUAT said that DAB had all along been supportive of the implementation of strong measures to promote the adoption of EVs, and advocated the provision of more incentives and ancillary facilities to further encourage the switch to EVs.

43. Ms Tanya CHAN asked about the existing policy on the procurement of electric private cars ("e-PCs") by the Government, as she observed that some newly commissioned private cars in the government vehicle fleet were petrol vehicles. She considered that relevant procurement guidelines should be updated so that, as far as private cars for use by government officials were concerned, all bureaux/departments ("B/Ds") must give priority consideration to



Action

the procurement of e-PCs.

44. The Deputy Director of Environmental Protection (3) responded that B/Ds were encouraged to procure EVs as far as practicable. There were many different types of vehicles in the government vehicle fleet, and the suitability of switching to EVs depended on, among other things, the supply and costs of EVs in the market and whether the EVs could meet the operational needs of the B/Ds concerned. All along, the Administration had been taking the lead in the adoption of EVs. The proportion of EVs to the overall government vehicle fleet was about two percentage points higher than the proportion of EVs to all registered road vehicles in Hong Kong. As there had been more and more e-PC choices in the market, EPD would work with the Government Logistics Department on a review of the procurement guidelines, with a view to further promoting the use of EVs by various B/Ds.

Reducing emissions of public transport vehicles

45. Ms Elizabeth QUAT and the Chairman considered that the Administration should take quicker actions to improve the environmental performance of public transport vehicles, especially if the technologies and/or methods to be adopted had been proven in other places; and a timetable should be set for the replacement of diesel franchised buses with electric buses. As the models of single-deck electric buses tested out under a trial scheme were found to be unsuitable for replacing conventional diesel buses in Hong Kong, the Chairman asked about the way forward regarding the adoption of electric buses. He suggested that the problem of reduced bus availability arising from the switch to electric buses might be overcome by reserving more standby buses to cope with contingencies.

46. USEN responded that although electric buses had been successfully introduced on a large scale in some Mainland and overseas cities, the bus models used in those cities might not be suitable for Hong Kong. As revealed in the trials of single-deck electric buses, the driving ranges of the models tested out were reduced by Hong Kong's rather unique settings and operating conditions, including the hilly terrain, high air conditioning loading especially in summer, and an operational mode that required frequent starting and stopping. As Hong Kong was a relatively small market, the Administration considered that there was a need to directly approach electric bus manufacturers for the development of customized models, in order to speed up the introduction of electric buses that could meet local operational needs. In this regard, the Administration had been discussing with franchised bus companies the required technical specifications of such buses.

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Air quality of semi-confined public transport interchanges

47. Ms Elizabeth QUAT expressed dissatisfaction that the ventilation and air quality of some semi-confined public transport interchanges ("PTIs") (e.g. those in Lam Tin and Tseung Kwan O) had remained poor even though improvement works had been carried out following public complaints. She asked how the Administration would tackle the problem and questioned whether the Practice Note for Professional Persons – Control of Air Pollution in Semi-Confined Public Transport Interchanges ("the Practice Note") issued by EPD was still up to date. She also urged the Administration to enhance the air quality of sheltered waiting areas erected by franchised bus companies on roadsides.

48. The Chairman asked about the timetable for the revision of the Practice Note.

49. USEN and AD(AP) responded that:

- (a) since the issuance of the Practice Note, EPD and relevant government departments (including the Electrical and Mechanical Services Department) had tested the air quality of many PTIs and rectified ventilation problems where necessary. The Administration would continue to take appropriate follow-up actions upon receiving public reports on poor air quality of PTIs. It had been observed that in many cases of public reports, user discomfort was mainly caused by the relatively high temperatures in PTIs;
- (b) the air quality of a PTI, as well as that of a roadside sheltered waiting area, was largely affected by the emissions of public transport vehicles operating there. The Administration had been implementing/preparing for a host of measures to reduce the emissions of franchised buses and public light buses ("PLBs"), such as (i) tightening the emission standards for first-registered vehicles to Euro VI in phases; (ii) introducing a trial scheme for electric PLBs in some routes (which, if successful, would be extended to routes with termini in PTIs); (iii) conducting a trial of retrofitting Euro IV and Euro V double-deck franchised buses with enhanced selective catalytic reduction systems, which could bring the emission performance of those buses to the Euro VI level; and (iv) encouraging franchised bus companies to deploy buses with lower emissions to routes using PTIs as termini or en-route bus stops; and

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- (c) EPD was reviewing the Practice Note with relevant government departments, and endeavoured to complete the review as early as possible in 2020.

**VI. Any other business**

- 50. There being no other business, the meeting ended at 10:28 am.

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Legislative Council Secretariat  
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