

立法會
Legislative Council

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Panel on Environmental Affairs

**Minutes of special meeting
held on Tuesday, 6 October 2009, at 2:30 pm
in the Chamber 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 LAU Kong-wah, JP
Hon Miriam LAU Kin-yee, GBS, JP
Hon Andrew CHENG Kar-foo
Hon Albert CHAN Wai-yip
Hon Jeffrey LAM Kin-fung, SBS, JP
Prof Hon Patrick LAU Sau-shing, SBS, JP
Hon Cyd HO Sau-lan
Hon CHAN Kin-por, JP
Dr Hon Priscilla LEUNG Mei-fun
- Member attending** : Hon IP Wai-ming, MH
- Members absent** : Hon WONG Yung-kan, SBS, JP
Hon LEE Wing-tat
Hon CHEUNG Hok-ming, GBS, JP
Hon KAM Nai-wai, MH
- Public officers attending** : Mr Edward YAU
Secretary for the Environment
- Mr Carlson KS CHAN
Deputy Director of Environmental Protection (3)
Environmental Protection Department

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

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

**Attendance by
invitation**

: City University of Hong Kong

Dr Richard CHEUNG
Associate Professor
Department of Biology and Chemistry

Clear The Air

Mr Christian MASSET
Chairman

Green Sense

Ms HO Ka-po
Project Manager

The Hongkong Electric Co., Ltd.

Mr WAN Chi-tin
Director of Engineering (Planning & Development)

Civic Exchange

Mr Mike KILBURN
Environmental Programme Manager

Clean Air Network

Mr Stephen WONG
Spokesperson

Civic Party

Mr Michael KWOK
Chairman, Environment & Sustainable Development
Branch

Friends of the Earth (HK)

Mr CHU Hon-keung
Environmental Affairs Manager

The Chinese University of Hong Kong

Professor WONG Tze-wai
Department of Community and Family Medicine

Public Omnibus Operators Association

Mr Matthew WONG
Chairman

Association of Engineering Professionals in Society

Ir YIM Kin-ping
Senior Vice Chairman

Individual

Mr Benjamin CHOU

Individual

Ms LIAO Chieh-mei

Individual

Ms Melanie MOORE

South Tokwawan Concern Group

Mr Edwin TOWN
Chairman

CLP Power Hong Kong Ltd.

Mr P C LO
Commercial Director

New World First Ferry Services Ltd.

Mr David WONG
Assistant General Manager (Engineering)

Discovery Bay Transportation Services Ltd.

Mr Chris WONG
Assistant Director

The Conservancy Association

Mr Peter LI
Campaign Manager

Individual

Mr Shaphan MARWAH

Individual

Ms Martha JOHNSTONE

New World First Bus Services Ltd./Citybus Ltd.

Ms Elaine CHAN
Deputy Head of Corporate Communication

The Incorporated Owners of Wei Chien Court, Wyler Gardens

Mr KAM Kwai-ki
Chairperson

海心居民協會

Mr S D LAM
Secretary

安和園二期大廈立案法團

Ms KWAN Sick-kun
Secretary

Democratic Party

Mr YIM Ka-wing
Community Officer

Greenpeace China

Mr Prentice KOO
Campaigner

China Hong Kong and Macau Boundary Crossing Bus Association

Mr CHAN Chung-yi
Secretary General

Hong Kong Bus Suppliers Association Ltd.

Mr John MA
Chairman

The Kowloon Motor Bus Co (1933) Ltd.

Mr Tim IP
Operations Director

The Hong Kong Institution of Engineers

Ir Dr CHAN Fuk-cheung
Vice President

Clean Air Action

Mr Paul TONG
Vice-Convenor

EnviroTech Co. (China) Ltd

Mr James FOK
Director

The Environmental Light Bus Alliance

Mr TSE Kin-wai

Public Light Bus General Association

Mr LING Chi-keung
Chairman

Taxi & PLB Concern Group

Mr LAI Ming-hung
Chairman

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

I. Review of Air Quality Objectives

The Chairman welcomed the Administration and deputations to the meeting to exchange views on Consultation Document on the Review of Air Quality Objectives (the Consultation Document).

Meeting with Dr Richard CHEUNG

2. Dr Richard CHEUNG said that the existing Air Quality Objectives (AQOs), which were last updated in 1987, would need to be reviewed. Despite the reduction in emission levels of air pollutants, there had not been much improvement to the air quality in Hong Kong which indicated that the air pollution problem was a regional one. He therefore supported the setting up of a stringent set of AQOs, rather than an easily achievable target. A specified time frame and action plan to achieve the new AQOs should also be worked out in consultation with stakeholders. Given that power generation was the major source of pollution, there was a need to use cleaner fuels.

Meeting with Clear The Air (LC Paper No. CB(1) 2670/08-09(02))

3. Mr Christian MASSET, Chairman, said that a review of AQOs had long been in need to reflect the economic and social evolution of the territory since the last update in 1987. He supported the adoption of the highest standards for AQOs, instead of any interim targets, for the protection of public health. To achieve the highest standards, he suggested that the Administration should take various control measures, including mandatory retirement of old polluting diesel vehicles, mandatory installation of fine particulate agglomerators at power plants, introduction of marine emission control areas as well as control and reduction of road traffic.

Meeting with Green Sense (LC Paper No. CB(1) 2670/08-09(03))

4. Ms HO Ka-po, Project Manager, said that Green Sense (GS) was concerned about the increase in electricity consumption of both the residential and commercial sectors by 18% and 28% respectively in the past 10 years. Apart from encouraging the use of cleaner fuel in power generation, the Administration should take measures to lower the electricity consumption with a view to reducing the emissions from power generation. In addition to implementing the 19 emission control measures as set out in the Consultation Document on the review of AQOs, consideration should be given to providing incentives, such as cash rebate, to residential and commercial

electricity account holders to encourage reduction in electricity consumption. Other measures, including introducing air-conditioned buses with windows that could be opened, setting up a taskforce for roof greening, increasing the first registration tax for private cars to encourage the use of public transport etc, should also be contemplated.

Meeting with The Hongkong Electric Co., Ltd.
(LC Paper No. CB(1) 2670/08-09(04))

5. Mr WAN Chi-tin, Director of Engineering (Planning & Development), said that the Hongkong Electric Co., Ltd (HKE) supported the adoption of a phased approach in setting the new AQOs, using the World Health Organization's (WHO) Air Quality Guidelines (AQGs) as benchmarks and taking account of local circumstances, with a view to improving air quality and protecting public health. HKE also supported the implementation of emission control measures as proposed by the Administration, in particular, the use of electric vehicles and increase in the ratio of natural gas for power generation to 50%. To achieve the 2010 emission reduction targets, HKE would increase the ratio of natural gas in electricity generation from 15% to 30% by next year. However, it would take time to set up additional facilities for the import and storage of natural gas. Meanwhile, HKE had planned to install three additional desulphurization facilities and two additional denitrification facilities in 2010. It was estimated that pollutants, such as sulphur dioxide (SO₂), respirable suspended particulates (RSP) and nitrogen oxides, could be reduced by 40% to 70% in 2010 as compared with that in 2005.

Meeting with Civic Exchange
(LC Paper No. CB(1) 2670/08-09(05))

6. While welcoming the review of AQOs, Mr Mike KILBURN, Environmental Programme Manager, said that Civic Exchange proposed the Administration to adopt the policy statement that "The HKSAR Government's policy goal is to improve outdoor air quality to the point where our pollution no longer poses a significant risk to human health as it does today." A clear and explicit health-based policy goal would help integrate internal policy-making and implementation, and send the right message to polluters and the public. The bureaux and departments responsible for the environment, health, planning and development portfolios should properly align their policy-making process to achieve the stated target. Apart from the proposed control measures, additional measures should be taken against emissions from vessels, including retrofitting of catalytic convertors for local vessels and extending the emission control to ocean-going vessels. To reduce vehicular emissions, the Administration should adopt a carrot-and-stick approach to encourage early replacement for highly polluting diesel trucks and buses. Disincentives, such as increasing the licence fees of owners of aged polluting vehicles, should be considered. A timeframe for implementation of various emission reduction measures should also be worked out.

Meeting with Clean Air Network

(LC Paper No. CB(1) 2670/08-09(06))

7. Mr Stephen WONG, spokesperson, said that air pollution was Hong Kong's most serious public health crisis, killing over 1 100 people every year. Therefore, the Administration should improve the air quality by adopting WHO AQGs, implementing clean-up measures to reduce air pollutants, and enhancing accountability by announcing the health impacts of air pollution, until pollution was no longer a significant threat to public health. Consideration should also be given to setting stricter interim targets for AQOs, in particular the level of SO₂ which should be in line with relevant WHO AQGs, and an early date for compliance. While supporting the 19 proposed emission control measures, the Administration should adopt a holistic approach in implementing these measures rather than focusing on the easier ones. Measures should also be introduced to reduce emissions from local vessels. Meanwhile, a mechanism should be set to review the progress of implementation of the emission control measures.

Meeting with Civic Party

(LC Paper No. CB(1) 2670/08-09(07))

8. Mr Michael KWOK, Chairman of Environment and Hygiene Committee, said that improving air quality would not only reduce air pollution but also improve public health and reduce health care expenditure. The existing AQOs, which had been in use for over 20 years, were outdated and should be reviewed. Given that emissions from power plants and vehicles were the main sources of air pollutants in Hong Kong, particularly SO₂ and RSP, the Administration should adopt more stringent AQOs for these pollutants. Civic Party (CP) was disappointed that the proposed AQOs only adopted WHO interim targets for SO₂ and RSP, which were not effective in improving air quality. More aggressive targets for AQOs should be set to achieve WHO interim target 2 in 2012, interim target 3 in 2017 and ultimate target in 2022. To reduce emissions from power generation, the Administration should explore the feasibility of replacing conventional fuels with renewable energy (RE) which was fast developing.

Meeting with Friends of the Earth (HK)

(LC Paper No. CB(1) 2670/08-09(08))

9. Mr CHU Hon-keung, Environment Affairs Manager, said that the Friends of the Earth (HK) (FoE) supported implementing the 19 emission control measures as soon as possible for completion by 2015. As roadside air pollution was a threat to public health, priority should be accorded to those emission control measures which would improve roadside air quality. The Administration should focus on protecting the environment and not over-emphasize the cost implications of the emission control measures.

Meeting with Professor WONG Tze-wai

(LC Paper No. CB(1) 2670/08-09(09))

10. Professor WONG Tze-wai said that as the objective of AQOs was to protect public health, it was pointless to set a sub-standard set of AQOs which could not

achieve the target. The Administration should explain the reasons for not adopting the ultimate WHO AQGs, and show its determination in actively reducing air pollutants and steadily moving towards the ultimate WHO AQGs within a specified time frame. He also pointed out that there were methodological limitations in the consultants' cost-benefit analysis in evaluating the various air pollution control strategies. Hence, the results of the cost-benefit analysis should only be used as aids or references, and not the only criteria in decision making. To improve air quality in Hong Kong, efforts should be made to reduce emissions and disperse air pollutants through effective urban design, building regulations, road design and transport management. A more proactive approach should also be adopted to tackle the regional air pollution problem. This included collaboration with neighboring seaports to mandate the use of cleaner fuels by ocean-going vessels with a view to reducing marine air pollution.

Meeting with Public Omnibus Operators Association

11. Mr Matthew WONG, Chairman, said that the Public Omnibus Operators Association (POOA), which comprised over 7 200 transport operators, would support the implementation of emission control measures to improve air quality. As many transport operators could not afford to replace their vehicles amid the financial crisis, POOA would urge the Administration to extend the application deadline for the one-off grant for early replacement of pre-Euro and Euro I commercial diesel vehicles. The scope of the scheme should also be extended to cover Euro I diesel vehicles registered after 1 April 1997 and Euro II diesel vehicles. Given the many technical problems of Euro IV vehicles, more testing should be conducted to ascertain the performance of Euro V vehicles before introducing these vehicles to the local market.

Meeting with Association of Engineering Professionals in Society (LC Paper No. CB(1) 2670/08-09(10))

12. Ir YIM Kin-ping, Senior Vice Chairman, said that Administration should show determination in reviewing the outdated AQOs which had been adopted since 1987. It was imperative that Hong Kong should adopt the highest international AQO standards, and put in place a well-defined timetable to achieve the interim and long-term targets. As regards financial implications on implementation of the emission control measures, the Society held the view that the Administration had downplayed the financial benefits of good air quality, which included reduced medical expenses, better working conditions, improved productivity, and increased foreign investments etc. Hence, the costs for emission control measures, some of which would result in a 20% increase in electricity tariffs and a 15% rise in bus fares, should first be borne by the Government and the enterprises producing emissions, rather than the community according to "user-pays" principle to avoid increasing the financial burden of the general public. The Administration should also proactively seek the co-operation of the Guangdong authorities to set out the regional AQOs, and map out emission control measures for both sides.

Meeting with Mr Benjamin CHOU
(LC Paper No. CB(1) 2709/08-09(01))

13. Mr Benjamin CHOU said that as a practicing lawyer in Hong Kong, he was very concerned about the impact of deteriorating air quality on the competitiveness of Hong Kong. In order to maintain Hong Kong's competitiveness and its status as an international finance centre, there was a need to attract and retain talents in Hong Kong. However, many international professionals were unwilling to stay in Hong Kong because of the poor air quality, and had opted to move to Singapore, London and New York. There was an imminent need for Hong Kong to adopt the highest AQO standards, and implement emission control measures with a view to improving air quality expeditiously.

Meeting with Ms LIAO Chieh-mei
(LC Paper No. CB(1) 2670/08-09(13))

14. Ms LIAO Chieh-mei said that as a teacher of very young children, she was extremely concerned about the long-term effects of air pollution on children's health. It was important that the Government should take steps to ensure clean air for children who could not take action by themselves. Studies had shown that young children were very sensitive to air pollution, and high levels of pollution had a far greater impact on the health of children whose lungs, hearts and blood vessels were still growing and maturing. Studies were also beginning to link lower IQ scores to air pollution exposure even before birth. Given that children in Hong Kong might face life-long health problems and a reduction in their life expectancy unless immediate action was taken, there was an urgent need for the Government to update AQOs and adopt the full WHO AQGs within a stated timeframe.

Meeting with Ms Melanie MOORE
(LC Paper No. CB(1) 2670/08-09(14))

15. Ms Melanie MOORE said that as a Hong Kong permanent resident, a taxpayer, a mother, and a professional working in the financial services sector, she was most concerned about the deteriorating air quality in Hong Kong. She said that the people in Hong Kong were most vulnerable to roadside pollution given the dense population and the high concentration of roadside emissions. Although the overall emission tonnage had fallen in the past 15 years, roadside pollution had yet to be improved. In fact, 40% of roadside emissions came from the fleet of outdated diesel-powered franchised buses. She urged the Government to adopt the ultimate WHO AQGs published in 2006, rather than taking a staged approach in updating the existing AQOs. More importantly, these standards should be implemented within a stated time frame. She urged the current Administration to substantially reduce emissions to improve public health before it stepped down in 2012.

Meeting with South Tokwawan Concern Group
(LC Paper No. CB(1) 2670/08-09(15))

16. Mr Edwin TOWN, Chairman, said that the South Tokwawan Concern Group represented residents and building owners in Tokwawan who were concerned about

the air and noise pollution from facilities to be built at Tokwawan for the development of Shatin-Central MTR project. These facilities included, among others, a concrete factory, a rock grinding facility and a dumping site. However, no public consultation on these facilities had been conducted so far. He also questioned if an Environmental Impact Assessment (EIA) had been undertaken to assess the impact of these facilities on the neighbouring community.

Meeting with CLP Power Hong Kong Ltd.
(LC Paper No. CB(1) 2670/08-09(16))

17. Mr PC LO, Commercial Director, said that CLP Power Hong Kong Ltd. (CLP) supported moving towards higher AQO standards in accordance with WHO AQGs, and would do its part to contribute to meeting the goal. CLP had pioneered in the use of cleaner fuels for power generation since the early 1990s through the introduction of natural gas and nuclear power to Hong Kong. The diversified fuel mix had not only ensured reliable supply of electricity at reasonable prices, but also minimized environmental impacts. CLP had been making good progress in the installation of Flue Gas Desulphurization facilities, and implementation of other emission control measures in the Castle Peak power plant to help meet the emission reduction targets by 2010. In view of the more challenging targets posed by the proposed new AQOs, CLP would need to significantly increase the use of natural gas for power generation to at least 50%. Concerted efforts from relevant parties were required to ensure a timely and sufficient supply of additional natural gas. CLP welcomed Government's continuous effort in engaging the industrial sector and other stakeholders to adopt emission control measures that were technically feasible, sustainable, cost-effective and implemented with realistic lead time.

Meeting with New World First Ferry Services Ltd.

18. Mr David WONG, Assistant General Manager (Engineering), said that the New World First Ferry Services Ltd (NWFFS) had participated in the Administration's trial scheme on the use of ultra low sulphur diesel (ULSD) with a view to reducing emissions from ferries and vessels. However, as the price of ULSD was much higher than conventional fuel, NWFFS could not continue with the use of ULSD unless subsidies were provided by the Government. Notwithstanding, NWFFS was prepared to install catalytic devices with a view to reducing emissions from its ferries by 50%.

Meeting with Discovery Bay Transportation Services Ltd.

19. Mr Chris WONG, Assistant Director, said that while welcoming the proposed emission control measures to improve air quality, the Discovery Bay Transportation Services Ltd. was concerned about the technical feasibility and cost implications of these measures to combat marine pollution. With the rising operating cost, ferry companies were experiencing increasing difficulties in continuing their business. There was a need for the Government and stakeholders to work out the means to finance these emission control measures according to the "polluter-pays" principle or the "user-pays" principle.

Meeting with The Conservancy Association
(LC Paper No. CB(1) 2670/08-09(18))

20. Mr Peter LI, Campaign Manager, said that the Administration should set a timetable for implementing the proposed AQOs. The Conservancy Association (CA) supported the proposed rationalization of bus routes, although it might only result in the cancellation of about 10% of bus routes at non-peak hours. Consideration should also be given to improving urban planning to provide better air ventilation. As regards cost, CA held the view that the Administration should endeavour to reduce the cost as far as practicable, and formulate a cost-sharing mechanism to finance the emission control measures.

Meeting with Mr Shaphan MARWAH

21. Mr Shaphan MARWAH said that poor air quality had seriously damaged the quality of life of the people in Hong Kong. He urged the Administration to adopt the highest WHO standards, and strictly enforce the emission control measures.

Meeting with Ms Martha JOHNSTONE

22. Ms Martha JOHNSTONE said that she agreed to the views of other deputations and had nothing more to add.

Meeting with New World First Bus Services Ltd./Citybus Ltd.

23. Ms Elaine CHAN, Deputy Head of Corporate Communication, said that the New World First Bus Services Ltd./Citybus Ltd. (NWFBS/Citybus) had all along been proactive in implementing environmental initiatives. This was evidenced by the replacement of retiring buses (the retirement age of which was usually about 17 years) by the latest and most environment-friendly models. At present, the bus fleets of NWFBS/Citybus mainly comprised Euro II models acquired during the period from 1998 to 2000. Efforts would be made to improve their environmental performance through retrofitting with emission reduction devices rather than replacing them, since pre-mature replacement might lead to wastage. Besides, the cost of replacement might be passed on to consumers unless subsidy would be provided by the Government. She added that NWFBS/Citybus had been working closely with the Administration on rationalization of bus routes in consultation with District Councils. In view of the strong objections from local communities, NWFBS/Citybus could only cancel about 10% of bus routes over the past five or six years.

Meeting with The Incorporated Owners of Wei Chien Court, Wyler Gardens
(LC Paper No. CB(1) 2670/08-09(19))

24. Mr KAM Kwai-ki, Chairperson, said that residents of Tokwawan would strongly object to the proposed construction of a concrete factory, a rock grinding facility and a dumping site in Tokwawan for development of the Shatin to Central Link and Central Kowloon Route. They were concerned about the air and noise pollution associated with the construction and operation of these facilities which might have serious impacts on the health of the neighboring community. They were

also concerned that the construction works would exacerbate the traffic problem in Tokwawan. He urged the Administration to address the concerns of Tokwawan residents.

Meeting with 海心居民協會

(LC Paper No. CB(1) 2670/08-09(20))

25. Mr S D Lam, Secretary, said that Tokwawan residents were concerned about the proposed construction of a concrete factory, a rock grinding facility and a dumping site in Tokwawan for the development of the Shatin to Central Link and Central Kowloon Route. As an average of around 600 trips per day by dump trucks was expected during the construction period, this would cause serious air and noise pollution and pose threat to Tokwawan residents. The construction works would also deprive Tokwawan residents of the opportunity to enjoy the recreational facilities near the harbourfront.

Meeting with 安和園二期大廈立案法團

26. Ms KWAN Sick-kun, Secretary, sought approval from the Chairman to allow Mr Edwin TOWN to speak on her behalf as she was not feeling well. Mr TOWN said that the scope of the proposed AQOs should be extended to include control on particulate matters smaller than 2.5 microns. The air quality assessment should also take account of the weather effect. He also pointed out that the MTR Corporation Limited had been misleading the public about the impacts associated with the construction works of the rail projects. In the absence of an EIA, the District Council concerned would not be able to assess the serious threats posed by the proposed facilities in Tokwawan. He stressed the need to put the construction works on a halt pending the completion of EIA and public consultation.

Meeting with Democratic Party

(LC Paper No. CB(1) 2670/08-09(22))

27. Mr YIM Ka-wing, Community Officer, said that the Democratic Party (DP) supported the review of AQOs based on WHO AQG, and the implementation of the 19 proposed emission control measures within a definite timeframe. However, DP was concerned about the possible increases in electricity tariffs and bus fares by 20% and 15% as a result of the increase in ratio of natural gas in local electricity generation to 50% and the early retirement of aged/heavy polluting vehicles respectively. As the Administration was silent in its share of the cost, DP was skeptical that it was trying to use the high costs to discourage the public from demanding more vigorous measures to improve air quality. As regards the cost-benefit analysis, DP held the view that the consultant had downplayed the benefits of improved air quality, which included better public health and reduced health care expenditure.

Meeting with Greenpeace China

(LC Paper No. CB(1) 2670/08-09(23))

28. Mr Prentice KOO, Campaigner, said that the proposed AQOs could not

effectively protect public health because the targets being adopted for SO₂ and other pollutants were too low. Hence, there was a need to adopt the highest WHO AQGs. He also pointed out that the questions raised in the public Consultation Document were leading questions and were not effective in engaging public views. A recent study on the review of AQOs commissioned by Greenpeace had revealed that over 70% of respondents had indicated support for upgrading AQOs in line with WHO AQGs, albeit the anticipated high cost. Future reviews of AQOs should also be conducted by an independent taskforce once every three years.

Meeting with China Hong Kong and Macau Boundary Crossing Bus Association

29. Mr CHAN Chung-yi, Secretary General, said that the China Hong Kong and Macau Boundary Crossing Bus Association (CHKMBCBA) had all along supported Government's policies on environmental protection. By way of illustration, CHKMBCBA members had actively participated in the voluntary replacement scheme for pre-Euro and Euro I diesel commercial vehicles. At present, most of them were using Euro III and IV models. CHKMBCBA also supported the introduction of electric vehicles as these were emission free and could save much fuel cost. He was aware that the Mainland authorities had put a lot of efforts in promoting the mandatory use of electric vehicles. The deployment of 50 electric buses for the Beijing Olympics had indeed won much international acclamation. Under the present technology, a five-hour charging would enable an electric vehicle to run 600 kilometres on flat roads and 400 kilometres on hilly roads. As such, Hong Kong should have no problem to switch to electric vehicles. More feasibility studies on the use of electric vehicles in Hong Kong should be conducted.

Meeting with Hong Kong Bus Suppliers Association Ltd.

30. Mr John MA, Chairman, said that Hong Kong Bus Suppliers Association Ltd. (HKBSS) had all along supported Government's environment policies. However, the Administration should thoroughly consult stakeholders before introducing any new environmental initiatives. HKBSS would support the continued use of incentives to encourage early replacement of more polluting pre-Euro and Euro I vehicles. Nevertheless, trial schemes should be launched before introducing new models of environment-friendly vehicles.

Meeting with The Kowloon Motor Bus Co (1933) Ltd.

31. Mr Tim IP, Operations Director, said that the Kowloon Motor Bus Co (1933) Ltd. (KMB) had been keen in using more environment-friendly buses. It had been able to meet the emission standards in Hong Kong. Apart from replacing about 200 buses every year, KMB had introduced the first Euro V bus model to Hong Kong in February 2009. The financial implications associated with the early replacement of polluting buses would depend on the types of buses to be replaced, timetable for replacement and supply of buses. KMB also supported the rationalization of bus routes as this would not only allow more flexible deployment of resources, but also achieve fuel savings and reduce emissions. However, rationalization of bus routes were not well received by the local community and it would take a long time before this could take effect.

Meeting with The Hong Kong Institution of Engineers
(LC Paper No. CB(1) 2670/08-09(24))

32. Ir Dr CHAN Fuk-cheung, Vice President, said that the Hong Kong Institution of Engineers (HKIE) supported the review of AQOs with reference to WHO AQGs and practices of other advanced economies. It also supported the adoption of a phased approach in tightening AQOs to achieve the ultimate WHO AQGs, and the continuous application of AQOs to both ambient and roadside exposure. While welcoming the inclusion of a mandatory review mechanism, HKIE held the view that the frequency of review should be reduced to once every four years, instead of the proposed five years. Given that changes in AQOs would affect the permitted emission standards for specific processes under the Air Pollution Control Ordinance (Cap. 311), consideration should be given to including a grandfather clause or a reasonable grace period for compliance. On emission control measures, HKIE considered the 19 proposed measures appropriate, but an authority might need to be set up to steer and oversee the implementation. Incentives should be provided to expedite the retirement of aged polluting vehicles. On cost, HKIE considered it unfair that bus passengers/consumers should bear in full the increase in bus fares/electricity tariffs. Instead, the Administration should discuss with bus/power companies on the funding arrangement, including cost-sharing. As regional collaboration was important, the Administration should join hands with the Guangdong authorities to review the findings of public consultation and formulate policies to improve regional air quality.

Meeting with Clean Air Action

33. Mr Paul TONG, Vice-Convenor, said that the Administration should put up warning signals in areas with poor air quality so that the public could take appropriate protective measures. Clean Air Action (CAA) also supported the implementation of "green traffic" through rationalization of bus routes, introduction of bus-bus interchange schemes, replacement of polluting buses and provision of cycling tracks. Consideration should also be given to setting up funds to encourage the development of environmental industries. Other environmental initiatives, such as mandatory implementation of building energy codes, green buildings, sorting and recycling of waste, waste charging scheme, should also be implemented.

Meeting with EnviroTech Co., (China) Ltd.
(LC Paper No. CB(1) 2670/08-09(12))

34. Mr James FOK, Director, said that the EnviroTech Co., (China) Ltd. was involved in the consultancy study on air quality in Hong Kong and the Mainland. While supporting the proposed AQOs, he was of the view that a priority list and an action plan should be worked out for implementation of the 19 emission control measures. Instead of implementing mandatory building energy codes, consideration should be given to introducing a "green point awarding system" to incentivize building owners to improve energy efficiency and other environmental performance of their buildings. Community involvement was necessary in putting forward environmental measures, such as wall greening, green roofing and green economy, the latter of which would create job opportunities for Hong Kong. There was also a need

to standardize the qualifications of employees working in the environmental-related business.

Meeting with The Environmental Light Bus Alliance
(LC Paper No. CB(1) 2709/08-09(02))

35. Mr TSE Kin-wai said that the transport trades were supportive of measures to improve air quality, and had participated in the trial use of various environment-friendly vehicles, including electric, liquefied petroleum gas (LPG) and Euro IV vehicles. While Euro IV vehicles were performing well in European countries, they were not designed to cater for the road situation in Hong Kong and had become quite problematic. As a result, many owners were reluctant to participate in the one-off grant scheme for the replacement of pre-Euro and Euro I diesel vehicles, despite that their vehicles had been in use for over 10 years. Given the uncertainty in the performance of Euro IV and V vehicles, the transport trades were at a loss as to whether they should or should not participate in the incentive schemes.

Meeting with Public Light Bus General Association

36. Mr LING Chi-keung, Chairman, said that that the Public Light Bus General Association (PLBGS) was supportive of environmental protection measures. In fact, PLBGS was one of the first to use LPG vehicles. However, PLBGS shared the concern about the uncertainty associated with the performance of Euro IV and V vehicles in Hong Kong and agreed that more trials should be conducted before introducing these vehicles to Hong Kong. As regards the 19 proposed emission control measures, PLBGS was most concerned about the pedestrianization schemes which would in effect transfer vehicular emissions to other areas nearby instead of solving the problem. The Administration was urged to provide clear guidelines to the transport operators when implementing pedestrianization schemes.

Meeting with Taxi & PLB Concern Group
(LC Paper No. CB(1) 2709/08-09(03))

37. Mr LAI Ming-hung, Chairman, said that most of the air pollutants were originated from the Pearl River Delta (PRD) Region. He said that while the taxi and light bus trades had been using cleaner vehicles some 10 years ago, the franchised bus companies were still relying on aged buses. According to record, there were over 4 000 pre-Euro, Euro I and II franchised buses on the roads. Hence, there was a need to encourage the early replacement of polluting buses and heavy vehicles. He supported the setting up of low emission zones (LEZ) as this would give bus companies and transport operators the needed pressure to replace their polluting vehicles.

Submissions from deputations not attending the meeting

(a) LC Paper No. CB(1) 2670/08-09(25) — Submission from The "Star" Ferry Co., Ltd.;

(b) LC Paper No. CB(1) 2670/08-09(26) — Submission from Trustworthy Investment Advisers Ltd.; and

(c) LC Paper No. CB(1) 2670/08-09(27) — Submission from WWF Hong Kong.

Meeting with the Administration

(LC Paper No. CB(1) 2670/08-09(28) — Paper on review of Air Quality Objectives prepared by the Legislative Council Secretariat (updated background brief)

Air Quality Objectives Review - Public Consultation

LC Paper No. CB(1) 2361/08-09(01) — Administration's paper on review of Air Quality Objectives)

38. The Secretary for the Environment (SEN) said that in preparing the Consultation Document, the Administration had held a number of discussions with Members and interested parties, and incorporated many of their views into the Consultation Document. SEN was pleased to note that deputations attending the meeting generally supported the updating of AQOs with reference to WHO AQGs published in 2006, albeit there were different views on the extent to which WHO AQGs should be adopted. To achieve the proposed new AQOs, the Review had identified a host of emission control measures targeting at all major emission sources, including emission capping and control, transport management, infrastructural development and planning, as well as enhancing energy efficiency. Some of these measures, such as the District Cooling System in the Kai Tak Development, were being implemented while some were in the pipeline pending introduction. The cost-benefit analysis conducted by the consultants had provided an estimate on the principal economic costs, including administrative costs of the Government in pursuing the relevant policies, incidental capital and operational costs to be borne by the entire community and incurred from implementing the proposed emission control measures. This served as a useful reference in assessing the cost-effectiveness of these measures. Meanwhile, incentive schemes were put in place to encourage early replacement of polluting vehicles. It was worth noting that the levels of air pollutants had been decreased from 20% to 9% over the past five years. SEN hoped that more views could be gathered before the consultation period ended on 30 November 2009.

39. As improved air quality would not only protect public health but enhance Hong Kong's international image and attract foreign investments, Mr CHAN Kin-por held the view that the Government should commit itself to improving air quality rather than focusing on cost recovery of the emission control measures. The priority for implementation of the 19 proposed emission control measures should be considered in the context of a long-term strategy to improve air quality to be worked out by the Administration. Given the significant benefits of the proposed increase in the ratio of natural gas in local electricity generation to 50% and the early replacement of aged/heavily polluting vehicles, these two measures should be accorded with priority. He also considered that the early retirement of the aging franchised buses would be a better alternative than the implementation of LEZ. Expressing similar concern, Mr IP Wai-ming said that the Administration would need to explain clearly the benefits

and cost-effectiveness of various emission control measures, as otherwise the public would find it hard to accept the consequential increases in bus fares and electricity tariffs. SEN said that the purpose of updating AQOs was to protect public health. While it would be difficult to quantify the exact benefits to public health as a result of the emission control measures, the consultant had conducted an economic assessment based on the best information available. The findings had been set out in the review report and Consultation Paper. In gist, all members of the community would set to benefit from improved air quality made possible by the emission control measures. He hoped that the community would support the proposed measures as a package.

40. Dr Priscilla LEUNG said that she was frustrated over the lack of coordination among the different departments in taking forward environment-friendly development projects. By way of illustration, the proposal on the provision of a central transport interchange in Mongkok was complicated by problems associated with land development and planning. The same applied to the harbourfront developments in Shamshuipo and the West Kowloon Cultural Development. In response, SEN confirmed that environmental protection was a major consideration which would be taken into account by the relevant bureaux and departments before taking forward development projects.

41. As public engagement was essential in taking forward environmental policies, Ir Dr Raymond HO considered it necessary for the Administration to step up public education, particularly for the younger generation. On the proposed emission control measures, he noted with concern that many of these measures were still at the conceptual stage and efforts should be made to expedite the process. These included provision of more incentives to promote the development and use of renewable energy (RE), as otherwise Hong Kong would lag behind the Mainland which had been actively involved in the development of RE and other environmental protection measures. SEN agreed to the need for concerted efforts from the community. On the local front, plans were already in the pipeline to develop energy from waste facilities and other forms of RE. The Administration also maintained close liaison with the Mainland authorities in taking forward various environmental initiatives, including participation of Hong Kong enterprises in the Clean Development Mechanism projects in the Mainland.

42. Ms Cyd HO considered it necessary for the Environment Bureau (ENB) to provide regular six monthly reports on the progress of measures adopted by both sides to improve regional air quality. She also asked if there was room for cross-boundary cooperation between local green groups and the Mainland authorities and if so, whether funding would be provided. SEN said that it was already an established practice for ENB to report to the Panel every six months on the progress of measures under the PRD Regional Air Quality Management Plan to achieve the 2010 emission reduction targets. The governments of Hong Kong and Guangdong had signed an agreement on environmental co-operation, under which both governments would work together to formulate a strategy to transform the PRD Region into a green and quality living area, and emission reduction proposals from 2010 onwards. Through the Chair, Mr CHU Hon-keung/FOE expressed support for joint cooperation between Hong Kong and the Mainland in taking forth environmental policies. He said that local green groups were more than happy to offer their contributions in this respect.

Early replacement of pre-Euro and Euro I diesel commercial vehicles as well as franchised buses

43. Despite the availability of various incentive schemes to encourage replacement of polluting vehicles with more environment-friendly models, Mr IP Wai-ming noted that some transport trade members, particularly those self-employed drivers, could not benefit from these schemes because the cleaner vehicles were beyond their affordability. He urged the Administration to take into account the needs of the trades before implementing environmental initiatives. To encourage early replacement of more polluting vehicles, consideration should be given to providing further assistance to the trades. Ms Miriam LAU said that the low take-up rate of about 10% of the \$3.2 billion one-off grant to encourage the early replacement of pre-Euro and Euro I diesel commercial vehicles was partly attributed to the problematic performance of Euro IV diesel replacement vehicles. The problems with Euro IV diesel vehicles were reflected in the frequent need for repairs. As a result, owners were reluctant to replace their existing vehicles using the one-off grants as there was no viable replacement. She stressed the need for the Administration to liaise with vehicle manufacturers with a view to resolving the technical problems associated with Euro IV vehicles. Consideration should also be given to extending the scope of the one-off grant scheme to cover Euro II vehicles to better utilize the scheme. In response, SEN confirmed that the Administration had followed up with the vehicle manufacturers about the technical problems associated with Euro IV vehicles. Positive progress had been made and further views from the trades would be sought as to how further improvements could be made. Meanwhile, drivers were advised to adjust their driving practices to cope with the characteristics of Euro IV vehicles. Efforts would also be made to ascertain the performance of Euro V vehicles in conjunction with the vehicle suppliers before these were introduced to Hong Kong.

44. Mr YIM Ka-wing/DP said that railways should remain the backbone of mass transport for better protection of the environment. Mr Paul TONG/Clear Air Action said that the 19 emission control measures should be implemented as soon as practicable and those with significant benefits should be accorded with priority. Mr LAI Ming-hung/Taxi & PLB Concern Group opined that penalty should be imposed on the use of polluting vehicles to deter continued ownership. Through the Chair, SEN said that railways would remain the backbone of mass transport, but other environment-friendly modes of transport should also be promoted. He added that consensus had to be reached before implementing the emission control measures, and that legislation would be required for some of these measures.

45. On early replacement of franchised buses, the Chairman sought the views from representatives of bus companies on the difficulties encountered, such as supply of buses, and assistance required. Mr CHAN Kin-por also enquired if it was possible to replace two to three thousand buses within a period of one to two years. Mr Tim IP/KMB said that KMB was prepared to discuss with the Administration on the early replacement of ageing buses. However, there was a need to provide the bus manufacturers with a time table to enable them to decide whether they could meet the demand for new buses. Ms Elaine CHAN/NWFBS/Citybus said that

NWFBS/Citybus would also be pleased to discuss with the Administration the time table for replacing aging buses. As the requirements for buses were quite stringent, bus companies would need to conduct a public tender exercise to select the suitable bus manufacturers to ensure that the needed requirements could be met. Reference would also be made to the track records of manufacturers as well as the quality and performance of buses they manufactured before placing orders. At present, most of the buses used by NWFBS/Citybus were procured from United Kingdom and other European countries. As the supply of buses would depend on the specifications required and the availability of production lines, she would not be able to provide a definite time frame within which new buses were made available. According to past experience, it would take at least nine months to one year for the manufacturers to deliver a bus to Hong Kong. For an order involving several hundred buses, this would have to be completed in phases. Mr CHAN Chung-yi/CHKMBCBA said that apart from Europe and other Commonwealth countries, the Mainland had become a major supplier of buses nowadays. Some bus manufacturers in the Mainland could produce as many as 3 000 buses per year. In fact, many non-franchised buses currently in use were manufactured in the Mainland. Hence, the Mainland should have no problem in supplying a few thousand buses to Hong Kong.

Rationalization of bus routes

46. Ms Miriam LAU said that while much effort had been put in promoting the rationalization of bus routes, this was not well received by the District Councils because it would result in the reduction in frequency or coverage of bus services. Since representatives of CP and DP were present at the meeting, she enquired about the stance of their political parties on the rationalization of bus routes. Mr YIM Ka-wing/DP said that district offices of DP had discussed the rationalization of bus routes. While DP was prepared to support rationalization of some bus routes proposed by bus companies, other political parties were opposed to the schemes. Mr Michael KWOK/CP agreed to the need for rationalization of bus routes in some districts. However, due consideration should be given to the inconvenience caused by the reduction in frequency and coverage of bus services in some districts where no alternative bus routes were available. Through the Chair, SEN explained that a 10% reduction in bus trips would be able to significantly reduce roadside emissions. He hoped that political parties as well as members of the public would support the proposed rationalization of bus routes, which would not only bring about considerable health benefits but also reduce the operational costs of franchised bus companies. Given the duplication of many bus routes, Mr CHU Hon-keung/FOE urged the political parties to support rationalization of bus routes which could effectively improve roadside air quality.

47. Ms Miriam LAU was pleased to note that there was general support for rationalization of bus routes. She pointed out that this was the only part of the 19 emission control measures which could save costs and relieve possible pressure of fare increase. As rationalization of bus routes would create a win-win situation, this should apply to all 18 districts which should render their support to the scheme. Consideration should also be given to reducing bus frequencies during non-peak hours and providing bus interchanges to facilitate commuters to change buses. Ms Cyd HO agreed that more suitable locations at the three cross-harbour tunnels, such as the

green belt areas, should be identified for use as bus interchanges. Incentives in the form of bus concessions should also be offered to encourage commuters to change buses before crossing the harbour. Ms Elaine CHAN/NWFBS/Citybus said that the proposed provision of bus interchanges near cross-harbour tunnels had been discussed before, but was considered not feasible due to technical constraints. Besides, approval of relevant departments governing land uses and planning was required for bus interchanges. She added that sectional fares and bus concessions had been offered to encourage the interchanges of buses.

48. The Chairman said that ENB should liaise with the Transport and Housing Bureau and the bus companies with a view to working out measures to facilitate rationalization of bus routes within different districts. These measures might need to be discussed jointly by the Panel on Environmental Affairs and the Panel on Transport. SEN said that concerted efforts would be required to take forward the rationalization of bus routes. In fact, he had exchanged views with the chairmen of the 18 District Councils on the proposal in the context of the Consultation Document.

Use of cleaner fuels by local vessels

49. Referring to the submission from the Star Ferries Company Limited (LC Paper No. CB(1)2670/08-09(25)), Ms Miriam LAU noted that the Company had tried ULSD in its ferries before and identified some technical problems associated with the use of the fuel. Given that the Environmental Protection Department had not provided any assistance in addressing the technical problems, the Company was not prepared to participate in the current trial on ULSD. She opined that the Government should try to resolve any problems before promoting the use of cleaner fuel. SEN said that as the use of ULSD would reduce SO₂ emissions by over 90%, the Government fleet had already switched to ULSD, which also proved that ULSD was suitable for local vessels. The Government had set aside \$10 million to subsidize ferry companies to participate in the trials to ascertain the technical and financial viability of switching to ULSD. Assistance would also be provided to address the technical problems, if any, associated with the switch as far as practicable. Mr David WONG/New World First Ferry Services Ltd said that three of their ferries had participated in the trial since 25 August 2009, and the outcome had been satisfactory so far.

50. Ms Miriam LAU said that the shipping industry was not opposed to the use of cleaner fuels by ocean liners. As pointed out by Professor WONG Tze-wai in his submission (LC Paper No. CB(1)2670/08-09(09)), there was a need for regional collaboration in mandating the requirement for using cleaner fuels by ocean liners. She enquired whether the Administration had initiated talks with the Mainland authorities in this respect. SEN affirmed that the Administration had been liaising with the Mainland on the requirement for ocean liners to use cleaner fuels. Meanwhile, arrangements would be made to allow cruises visiting Hong Kong to make use of on-shore electricity supply at the future Cruise Terminal.

51. The Chairman thanked members and deputations for giving their views on the Consultation Document.

II. Any other business

52. There being no other business, the meeting ended at 5:45 pm.

Council Business Division 1
Legislative Council Secretariat
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