

**Confirmed Minutes of the 191st Meeting of
the Advisory Council on the Environment
held on 18 March 2013 at 2:30 pm**

Present:

Prof Paul LAM, JP (Chairman)
Prof CHAU Kwai-cheong, JP (Deputy Chairman)
Dr Gary ADES
Dr Dorothy CHAN, BBS
Prof FUNG Tung
Dr Billy HAU
Mr Anthony LOCK
Prof John NG
Miss Yolanda NG
Dr Alfred TAM
Dr Eric TSANG
Dr Carrie WILLIS, SBS, JP
Mr Luther WONG
Prof Jonathan WONG, MH
Ms Pansy YAU
Dr Eric YIP
Prof Ignatius YU
Mr Andrew LAI (Secretary)

Absent with Apologies:

Mr Oscar CHOW
Dr HUNG Wing-tat, MH
Prof LI Xiang-dong
Prof Nora TAM, BBS, JP
Prof Ray YEP

In Attendance:

Ms Anissa WONG, JP	Permanent Secretary for the Environment/Director of Environmental Protection
Mr Y K CHAN	Assistant Director (Conservation), Agriculture, Fisheries and Conservation Department (AFCD)
Mr LING Chi-tack	Assistant Director of Planning/Technical Services, Planning Department (PlanD)

Dr Albert AU	Senior Medical and Health Officer (Environmental Health and Toxicovigilance), Department of Health (DH)
Ms Esther LI	Principal Information Officer, Environmental Protection Department (EPD)
Miss Evelyn LEUNG	Chief Executive Officer (CBD), EPD
Ms Joanne CHIN	Executive Officer (CBD), EPD
Ms Daicie TONG	Executive Manager (CBD), EPD

In Attendance for Item 3:

Mr Samson LAI	Assistant Director (Waste Management Policy), EPD
Dr Alain LAM	Principal Environmental Protection Officer (Waste Management Policy), EPD
Mr Stephen SIU	Senior Environmental Protection Officer (Waste Management Policy) ² , EPD

In Attendance for Item 4:

Mr W C MOK	Assistant Director (Air Policy), EPD
Mr S W PANG	Principal Environmental Protection Officer (Air Policy), EPD

In Attendance for Item 5:

Mr W C MOK	Assistant Director (Air Policy), EPD
Dr Vanessa AU	Senior Environmental Protection Officer (Mobile Source) ¹ , EPD

Action

Item 1 : Confirmation of the draft minutes of the 190th meeting held on 29 January 2013

The draft minutes were confirmed without amendments.

Item 2 : Matters arising from the minutes of the 190th meeting held on 29 January 2013

- At the last meeting, Members requested an update on the public

consultation conducted by the Airport Authority Hong Kong (AAHK) on the third runway EIA study. AAHK had prepared a progress report on the stakeholders' engagement exercise and the Secretariat issued it for Members' reference on 11 March 2013.

3. The Chairman suggested and Members agreed that the subject on 'Operational transparency of ACE' would be dealt with under "Any other business".

Item 3 : Public consultation on a Producer Responsibility Scheme on Glass Beverage Bottles

(ACE paper 1/2013)

4. Mr Samson Lai briefed Members on a new producer responsibility scheme (PRS) on glass beverage bottles. The Government had rolled out a three-month public consultation on the PRS which would end on 6 May 2013. Members were invited to give their comments on the proposed scheme.

5. A Member asked about the Government's assessment on the viability of the proposed scheme and more supporting information such as the total volume of glass beverage bottles generated in Hong Kong, relevant cost data, treatment capacity of the recycling plants, local absorption capacity of the glass products, and provision of incentives for the public to take part in the recycling programme. Mr Samson Lai replied that the effectiveness of separation at source would be a key factor to the success of the scheme. The Government would encourage the glass management contractor (GMC) to consider the provision of incentives, for example, refund could be offered to the public for depositing recyclable materials to the collection points. Green stations to be set up at community level could also strengthen the logistics support for local residents and property management to practise separation at source. Municipal solid waste charging, if implemented, would also give a further impetus to reduce waste at source. All these measures would help drive up the recovery rate for wastes. Regarding the recycling fee, the proposed level of \$1/litre was taken as a good indicative figure for discussion in context. The actual fee level of the PRS, nevertheless, would be subject to the tender exercise for the GMC, costing exercise and approval of the Legislative Council (LegCo). As regards the capacity of the treatment plants, Mr Lai acknowledged that at present the commercial recyclers might not be ready to invest in the treatment facilities while the recycling programmes were only at a limited scale. However, with the implementation of the mandatory PRS, an estimated annual 40,000 tonnes of

waste glass bottles were expected to be recovered, leading to a significant expansion in the demand for treatment which would encourage private investment. He advised that a new treatment plant was being set up by a private recycler in the EcoPark which would treat glass bottles.

6. A Member enquired on the role of the Advisory Council on the Environment (ACE) in deliberating the proposal already in the stage of public consultation and the interface between ACE's comments and conclusion of the consultation. The Chairman explained that ACE was to give advice to the Government on issues relating to environmental protection and nature conservation. Members could reach conclusions on matters discussed at the meeting and that consensus view could be presented as the Council's advice to the Government. The gist of discussions incorporating Members' views and the meeting's conclusion would be recorded in the minutes of meeting and uploaded on the Council's website for reference of the public. In reply to the Member's further enquiry on what an ACE Member could do if he/she had views on the consultation document which were not fully reflected at the meeting, the Chairman advised that ACE had no stated protocol on this and individual ACE Members could give comments to the Government alike as any member of the public. Mr Samson Lai added that for the current PRS proposal, the Government had launched a three-month public consultation reaching out to different stakeholders and individual community groups. The Government would take into account views received during the consultation and report to the LegCo on the proposed way forward. ACE's view would be included. The Government would also report to ACE at an appropriate opportunity on the progress of the scheme.

7. A Member asked if local beverage manufacturers would be exempted from the payment of the recycling fee and whether there would be penalties on retailers in case of non-compliance with the requirement to provide consumers with information on recycling of waste glass beverage bottles. Mr Samson Lai advised that local manufacturers with a corporate reuse/recycling plan to the satisfaction of the Government would be entitled to the exemption. There would likely be a penalty provision for retailers who refused to provide recycling information to consumers, but he envisaged little difficulty in this aspect as the GMC would be required to provide handy information for retailers to deploy when selling beverage to consumers. He explained that the requirement was to ensure that consumers would not be discouraged from participating in glass recycling because they had no access to relevant recycling information.

8. A Member was supportive of launching the PRS on glass beverage bottles. He suggested, and echoed by another Member, that collection of recycled glass food bottles and the relevant public education should commence in parallel so as to put forward the concept of glass recycling as an obligation/commitment of the community. Mr Samson Lai said that glass food bottles would be accepted for recycling on a voluntary basis if the bottles were properly cleansed. In consideration that the society might not be fully ready to go for mandatory glass recycling across the board, the charge was proposed to first be levied on glass beverage bottles. The Government in parallel would step up public education on reuse of glass food bottles. The Environment and Conservation Fund (ECF) could sponsor programmes for these initiatives while the community green stations could also play a part in this respect. Mr Lai stressed that the community's response would be the key determining factor on whether and when to extend the PRS to glass food bottles.

9. A Member considered that encouraging the public to take waste glass bottles to the collection point was the key to the success of the scheme, and the most effective means was the provision of monetary incentive. He suggested the Government to consider including in the contract with the GMC a requirement to provide incentives, for example, by requiring the contractor to set aside a portion of the recycling fee collected for the incentive scheme. Conveniently located collection points for local residents was another key success factor for the scheme. A Member echoed that the Government could also consider incorporating a penalty clause which required the GMC to attain a minimum recovery rate specific to the collection points so that the contractor would explore all practicable measures to increase the volume of waste glass items returned. Mr Samson Lai thanked Members for the suggestions which would be taken into account when the Government drew up the details of the tender documents.

10. A Member said that the Government should put forward a strong message that reduction at source and recycling were obligations of every member in the community. Another Member shared that the current consultation exercise should give concrete information as to how the recovery rate targets could be achieved under the mandatory PRS. Mr Samson Lai explained that the Government had drawn experiences from international and local recycling programmes and taken into account the benefits of implementation of other initiatives such as waste charging and community green stations. He was confident that with the Government's multi-pronged waste management measures and the active participation of the public, the target

recovery rate of 70% was achievable.

11. The Member further pointed out that the public would generally put all types of waste glass bottles together, and the GMC had to sort out the glass beverage bottles from other items before recycling. This would be of particular concern for residential households in the community. Mr Samson Lai clarified that glass food bottles properly cleansed were good for recycling. The GMC would not accept “dirty” food bottles as that would affect the recycling operation.

12. In reply to A Member's enquiry on the operation of the community green stations, Mr Samson Lai said that the Government would set up five pilot community green stations in different parts of the territory, and to engage non-governmental organizations (NGOs), returning through open tender, to run/manage these stations. The NGOs could leverage on their local connections and reach out to property management companies, schools, relevant institutions and stakeholders in each of the districts to facilitate the collection task. They could establish regular collection arrangements with different residential estates and schools etc.. The green stations could give clear information to the community as to how and what the recyclables would eventually be turned into productive use. These measures could form part of environmental education as well as in boosting up the recovery rate.

13. A Member suggested the Government to engage retailers in collecting waste glass bottles so that the public could bring back the bottles to them with greater convenience. Mr Samson Lai explained that the successful experience called for the set up of collection points within individual residential estates. The Government would work with property management companies accordingly. In response to the Member's further concern regarding the local capacity in absorbing all the recycled products recovered under the PRS, Mr Lai said that at present the recycled glass materials were mainly used for production of eco-pavers for public works projects. The Government had conducted researches in conjunction with other institutions on alternative applications of the recovered materials so as to ensure adequate local capacity to absorb the anticipated collection of around 40,000 tonnes of glass bottles annually upon successful implementation of the PRS initiatives. He advised that Government's works departments had already commenced preparatory work on the broader use of recycled glass materials. The recycling fee collected could finance a significant portion of the recycling cost, thus making the recycled products more competitive in the market. The private sector was expected to

increase the use of these recycled materials in their construction works as well.

14. Four Members suggested the Government to consider extending the current PRS to cover glass food bottles or other glass containers. They noted that as glass food bottles had accounted for a substantial proportion of glass bottles ending in the landfills, recovery of these glass items would be essential for the success of the scheme. They did not anticipate great difficulty for the public to cleanse the bottles as cleansing was taken as part of the household routine and when the public became increasingly aware of the need of glass recycling. From the publicity angle, PRS on glass beverage bottles excluding food bottles would give a wrong signal to the community that the Government was not committed to glass recycling.

15. Mr Samson Lai reiterated that while glass food bottles were not covered under the mandatory PRS, any food bottles, if properly cleansed, would be accepted by the GMC for recycling. For the purpose of a mandatory scheme, it was important for the Government to first ascertain the readiness of the public in cleansing glass food bottles, the lack of which could pose a public hygiene problem, and thus render the PRS an unwelcome measure in the community. From the public livelihood perspective, imposition of the recycling fee on glass food bottles might create a social impact in view of the likely pressure on inflation. Continued efforts would be made to raise public awareness so that the PRS might cover glass food bottles in future.

16. The Chairman thanked Mr Lai for briefing ACE on the consultation. He concluded that Members were supportive of the scheme. Major suggestions from Members included providing incentives and practices to encourage the public to bring the waste glass bottles to the designated collection points, extending the PRS to cover as wide a spectrum of glass items as possible, as well as the concern over the sufficiency of local demand for the recycled glass products. He expected the Government to report to ACE on further developments of the scheme.

Item 4: Review of the Air Pollution Index Reporting System
(ACE Paper 2/2013)

17. A Member declared an interest as he was a member of the research team which advised EPD on the review of the Air Pollution Index (API) reporting system and the implementation of the new health-based Air Quality Health Index (AQHI) system. The meeting agreed that the Member could stay

on and take part in the discussion of this item.

18. Mr S W Pang briefed Members on the proposal to replace the existing API reporting system which had been in use since 1995, by a new health-based AQHI system to tie in with the launch of the new Air Quality Objectives (AQOs) in early 2014. The new AQHI would communicate air pollution information to the public in the form of an index, and to reflect the cumulative nature of air pollution on the risk to public health.

19. In response to the Chairman and a Member's enquiries on how the new AQHI was determined, Mr S W Pang replied that the AQHI was a health risk-based reporting system which made reference to the relationship between local air pollution and the increase in hospital admission risk. Specific health advice would be issued to the public when the AQHI reached the high or above categories. The two cut-off points for the high health risk categories (i.e. 11.29% - 12.91%) were determined by referencing to the increase of aggregate hospital admission risks when the air pollutants are at the Air Quality Guidelines (AQG) of the World Health Organization (WHO) for susceptible and general population respectively. He advised that the other AQHI bands were determined accordingly in a linear relationship.

20. A Member welcomed the proposal. He enquired how the Government would communicate the new AQHI to the general public in comparison to the prevailing API system, and whether there would be consultation with relevant stakeholders and the community before the implementation. Mr W C Mok replied that under the new AQHI system, health implication of air pollution would be reflected in terms of the AQHI bands. Specific health advice would be issued to people with different susceptibility to air pollution when the AQHI reached high or above categories. Before rolling out the new AQHI system, apart from seeking views from stakeholders, specific guidelines would be developed for different groups and parties such as school teachers to assist them to schedule physical education lessons for their students. Back-end computing system and EPD's website would also be revamped and upgraded to facilitate public understanding of the new AQHI. Mr Mok advised that while the frequency of high or very high AQHI incidents could be at high levels during the initial launch phase, the frequency would gradually be reduced when the air quality improvement measures took effect.

21. Three Members welcomed the new AQHI. One of the Members considered the new AQHI a good move to reflect the actual state of air pollution

in Hong Kong despite that the new reporting system might give an impression of a deterioration of air quality in the territory, with more days that the new index staying at high or above categories. One of the Members took the AQHI as scientifically robust in communicating to the community the health risk associated with air pollution. Two of the Members were concerned on how the AQHI bands and the scientific information in the respective bandings could be conveyed to the public for easy comprehension and appropriate follow up. One of the Members also asked on the rationale for the relatively lower hourly API statistics under the new AQHI system as set out in the paper.

22. A Member enquired on the reporting system which Mainland China was using and whether the standard of the AQHI was used in other jurisdictions.

23. Mr W C Mok thanked Members for their comments and suggestions which would be taken into account when working out the strategy to present the AQHI to the public. The AQHI reporting was developed from similar systems adopted in Canada and the European Union (EU). He advised that the public would be informed of the health risk category in terms of the description “low”, “moderate”, “high”, “very high” and “serious” and the associated health advice but not the increase in health risk associated with the air pollution level, which was too technical for the public to comprehend. As for the hourly statistics in the paper, Mr Mok pointed out that deviations of the hourly statistics between the current API and the new AQHI were due to that one of the benchmarks for rating the API was the daily limit of nitrogen dioxide (NO₂), which was often exceeded at the roadside, while the new AQOs would be more concerned on the hourly concentration of the pollutant. Mr S W Pang supplemented that the use of 24-hour moving averages in the current API would not only cause significant time lag in air pollution reporting but could also give rise to an unnecessary lingering of “elevated” APIs even though the air pollution had already subsided. The new AQHI was an improvement to the current system as air pollutant concentrations were calculated on the basis of a three-hour moving average which could follow closely the changes in the pollution pattern and in turn could provide more timely and accurate air pollution information to the public.

24. In response to the enquiries from two Members on the response arrangements for outdoor workers in response to specific health advice, Mr W C Mok informed that the Occupational Health and Safety Ordinance required employers to ensure a practicably safe and suitable work environment for their employees. In this regard, the Labour Department had already issued a checklist for Risk Assessment of Outdoor Work under High Air Pollution Levels

for reference of employers. The department would update the checklist as necessary to tie in with the new AQHI system.

25. The Chairman concluded that Members welcomed the proposed replacement of the existing API by the proposed AHQI system which could convey more useful and accurate air pollution information to the public from the health perspective.

Item 5: Phasing out Heavily Polluting Diesel Commercial Vehicles
(ACE Paper 3/2013)

26. Dr Vanessa Au briefed Members on the proposal to phase out pre-Euro IV diesel commercial vehicles (DCVs) through an incentive-cum-regulatory approach and to limit the service life of newly registered DCVs at 15 years as proposed in the 2013 Policy Address. Under the proposal, the Government would earmark \$10 billion to offer an ex-gratia payment of up to 30% of the taxable values of new vehicles to vehicle owners for phasing out their pre-Euro IV DCVs. There were plans to stop the renewal of vehicle licences for pre-Euro IV DCVs in phases and to set a statutory time limit of 15 years for the service life of the newly registered DCVs. The latter would provide a long-term solution to the roadside air pollution problem caused by aged DCVs through a continued upgrading in the emission performance of the commercial vehicle fleet.

27. A Member supported the initiative to phase out heavily polluting DCVs and asked if there were measures to ensure that major vehicle dealers/suppliers would not raise the vehicle price and/or their profit margin in view of the Government's initiative. Mr W C Mok said that major vehicle suppliers from Europe and Japan were already competing for business in the local vehicle market which was open and transparent. It was unlikely for vehicle suppliers to drastically raise the vehicle prices. Efforts were also made to encourage interested parties to bring in vehicles from new sources of supply to further increase market competition.

28. In reply to a Member's enquiry on which emission standard had to be met by the new vehicles for registration, Mr W C Mok said that a vehicle owner must register his/her new vehicle that met the prevailing emission standard in order to receive the allowance. At present, Euro V was the prevailing standard adopted in Hong Kong.

29. A Member supported the proposal and asked about how the statutory retirement age of 15 years was determined and whether the vehicles were required to undergo annual checking up to retirement. Mr W C Mok said that the 15-year retirement limit was determined with reference to service limits for DCVs set by other countries, e.g. 15 to 20 years by Mainland China, London and Singapore respectively. He considered that 15 years was a right balance having regard to the intensive usage of local vehicles and the pace of upgrading standard of commercial vehicles in the EU and Japan. Mr Mok added that the Government was consulting the transport trade on the details of the proposal including the statutory retirement age for newly registered vehicles, level of ex-gratia payment and the implementation timetable. Regarding the annual checking of vehicles, Mr Mok said that all DCVs must undergo and pass the roadworthiness examination of the Transport Department (TD) for licence renewal. The roadworthiness examination included a smoke emission test which could reflect the maintenance state of a vehicle.

30. Mr W C Mok further explained that TD could not adopt the prevailing Euro IV standard when conducting the annual check on a pre-Euro IV DCV as the vehicle could not meet all requirements due to design and construction limitations. As regards more advanced vehicles that relied on after-exhaust treatment devices to reduce their emissions, the Government was closely monitoring the developments in environmentally advanced countries in testing their emission performance, particularly the emission of nitrogen oxides (NOx), which was the key attributor to roadside air pollution. At present, there was no simple test for checking the NOx emission of in-use diesel vehicles, and the EU was exploring the feasibility to develop such a test. The Government would closely follow these developments with a target to introducing such a test in Hong Kong.

31. A Member welcomed the proposal and asked about the anticipated impact on the vehicular traffic between Hong Kong and Mainland China especially when the Hong Kong-Zhuhai-Macao Bridge (HZMB) and the Ad Hoc Quotas for Cross Boundary Private Cars were in place. Mr W C Mok replied that all new cross-boundary DCVs commuting in Hong Kong must be registered with TD and complied with the prevailing legislations and emission standards set in Hong Kong. The Transport and Housing Bureau (THB) and TD would take into account all relevant implications of cross-boundary traffic for Hong Kong including environmental impacts when working out with the Mainland authority the cross-boundary traffic arrangements.

32. A Member supported the proposal in principle and asked if the Government would provide further financial assistance to those “sole proprietor vehicle owners”. Mr W C Mok said that for those owners who would opt to replace the vehicles aged above 18 years with newly registered vehicles of the same class, they would be paid up to 18% of the vehicle taxable value, and 10% for those who did not seek replacement by buying new vehicles. He pointed that there were not many commercial vehicles which had a service life of over 20 years because of their reduced operational reliability. The ex-gratia payment was considered reasonable and the Government was collecting further views from the transport trade in this respect. There was no indication that “sole proprietor vehicle owners” had difficulties obtaining loans for the purchase of new commercial vehicles given the mature vehicle financing market. Having regard to the practices of free market economy in Hong Kong, it would not be appropriate for the Government to interfere with the commercial operation of vehicle loans.

33. A Member was supportive of the proposal but was concerned on the take-up rate in view of the lukewarm responses to the two voluntary incentive schemes previously launched. Mr W C Mok explained that the current proposal included a mandatory phasing out timetable for these vehicles and once the relevant legislative provisions were passed by the LegCo, these vehicles would not have their licences renewed by certain deadlines. The Chairman added that ACE could help drum up support for the proposal during the legislative stage when there were deputation meetings on the subject.

34. In response to a Member's enquiry on the extent of increase in subsidy as compared with previous voluntary incentive schemes, Mr W C Mok confirmed that the subsidy level had been raised from 18% to 24% of taxable values of newly registered vehicles for Euro II vehicles aged between 13 and 16 years. Vehicle owners did not receive any subsidy in the previous schemes if they simply scrapped the used vehicles. They would be offered a 14% subsidy in the current proposal and with the flexibility to use the subsidy to buy second-hand vehicles as replacement.

35. The Chairman concluded that Members unanimously supported the proposal to phase out pre-Euro IV DCVs through an incentive-cum-regulatory approach and to set a statutory retirement age of 15 years for newly registered DCVs.

Item 6: Any other business

EIA report of non-selected project

36. The Chairperson of the Environmental Impact Assessment (EIA) Subcommittee reported that since the last Council meeting, the EIA Subcommittee had received the Executive Summary of the EIA report on “Drainage improvement works at Ngong Ping” submitted by the Drainage Services Department and on “Kai Tak Development – Roads D3A & D4A” submitted by the Civil Engineering and Development Department. The two projects had not been selected by the Subcommittee for discussion. The Executive Summaries of the two projects had been circulated to Subcommittee Members for comments and the relevant hyperlinks of the summaries were also sent to non-EIA Subcommittee Members. The public inspection period for the Ngong Ping project would end on 22 March 2013 while that for the Kai Tak project on 3 April 2013. Members’ comments on the EIA reports, if any, could be sent to the Director of Environmental Protection (DEP) direct within the respective prescribed periods.

Suggestions raised by a Member on the operation of the Council

37. As regards the suggestion on the operation of ACE from a Member as reflected in his e-mail to ACE Members, the meeting agreed that Members could raise discussion topics or submit papers for discussion at ACE meetings. Members also concurred with the Chairman’s proposal that for a Member to raise a discussion topic or forward his/her paper to the Secretariat, the topic or paper concerned would first be developed by the Secretariat such as consulting and collecting information from relevant bureaux and/or departments. When the subject was mature for discussion at the Council meeting, the Chairman would direct accordingly. This could avoid issues being raised at a haphazard manner which might disrupt the normal proceeding of a Council meeting.

38. The Chairman informed Members that it was not the established practice to attach a Member’s submission to the minutes of meeting. He opined that key issues discussed at the meeting would be recorded in the minutes. Should a submission be attached to the minutes, there might be confusion as to whether the submission represented the view of an individual Member or the consensus view of the Council. This concern was echoed by another Member. The Chairman remarked that in case a Member could not attend the meeting, he/she could provide a written submission to the Chairman

and the Secretariat beforehand. During the meeting, the Chairman would refer to the submission and brought up the issue for discussion so that it would be suitably recorded in the minutes. The meeting endorsed the above arrangement.

ACE – Arrangements on operational transparency

39. The Chairman informed Members that the Secretariat had conducted a research on the practices of other advisory and statutory bodies (ASBs) and issued an information paper on the subject to facilitate Members' discussion. He summarized the key findings and remarked that ACE was relatively transparent as compared with other ASBs in the meeting arrangements. He made reference to the Town Planning Board (TPB) and invited Members to consider if they saw the need for ACE to extend the current practice beyond broadcasting the presentation and question-and-answer sessions on an EIA report at the full Council and the EIA Subcommittee meetings. Members were invited to have further discussion of the matter in future.

Item 7 : Date of next meeting

40. The Chairman informed Members that the next meeting was scheduled on 22 April 2013 (Monday). Members would be informed of the agenda in due course.

ACE Secretariat

April 2013