

**Confirmed Minutes of the 124<sup>th</sup> Meeting of  
the Advisory Council on the Environment  
held on 14 March 2005 at 2:30 p.m.**

**Present:**

Prof. LAM Kin-che, J.P. (Chairman)  
Mr. James GRAHAM  
Prof. HO Kin-chung, B.B.S.  
Prof. Howard HUANG  
Prof. Paul LAM  
Ms. Goretti LAU  
Mr. Peter Y C LEE  
Dr. NG Cho-nam, B.B.S.  
Mrs. Mei NG, B.B.S.  
Mr. Markus SHAW  
Ms. Iris TAM, J.P.  
Mr. TSANG Kam-lam  
Prof. WONG Tze-wai  
Mr. Eric CHAN (Secretary)

**Absent with Apologies:**

Prof. POON Chi-sun  
Prof. WONG Yuk-shan, B.B.S., J.P.

**In Attendance:**

Mr. K K KWOK, J.P.	Permanent Secretary for the Environment, Transport and Works (Environment)
Mr. Raymond FAN	Deputy Secretary for the Environment, Transport and Works (Environment)1
Mr. Roy TANG	Deputy Secretary for the Environment, Transport and Works (Environment)2
Mr. Rob LAW, J.P.	Director of Environmental Protection
Mr. Jimmy LEUNG	Assistant Director/Technical Services Planning Department
Miss Brenda LEE	Secretariat Press Officer, Environment, Transport and Works Bureau (ETWB)
Ms. Polly LEUNG	Principal Information Officer Environmental Protection Department (EPD)
Ms. Josephine CHEUNG	Chief Executive Officer (E), ETWB
Miss Sarah NG	Executive Officer (E), ETWB

**In Attendance for Agenda Item 3 :**

Ms. Miranda CHIU	Deputy Secretary for Economic Development and Labour (Economic Development)1, Economic Development and Labour Bureau (EDLB)
Mr. Harry LAI	Chief Electrical & Mechanical Engineer (Electricity Team), Economic Development Branch, EDLB

**In Attendance for Agenda Item 5 :**

Mr. W C MOK	Chief Assistant Secretary (Environment)1, ETWB
Mr. H N LAU	Senior Environmental Protection Officer (Environment)1, ETWB

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Action

The Chairman welcomed Mr. Raymond Fan who had assumed the post of Deputy Secretary for the Environment, Transport and Works (Environment)1 of ETWB.

**Agenda Item 1 : Confirmation of the draft minutes of the 123<sup>rd</sup> meeting held on 18 February 2005**

2. The draft minutes were confirmed without amendment.

**Agenda Item 2 : Matters arising from the minutes of the 123<sup>rd</sup> meeting held on 18 February 2005**

3. There was no matter arising from the minutes of the last meeting.

**Agenda Item 3 : Future Development of the Electricity Market in Hong Kong – Stage I Consultation**  
*(ACE Paper 4/2005)*

4. A Member declared interest. Her company had provided consultancy service to the two local power companies but the projects were not directly related to the subject matter under discussion. The Chairman suggested and Members agreed that the Member could continue to take part in the discussion.

5. Ms. Miranda Chiu briefed Members on the Consultation Document which summarised the key findings of the initial phase of the electricity market review and the arrangements for Stage I of the public consultation on the future development of electricity market after 2008, when the Scheme of Control Agreements (SCAs) the Government had signed separately with the two local power companies expired. Ms. Chiu pointed out that it remained the Government's policy objective to ensure that consumers continued to receive reliable, safe and efficient electricity supply at reasonable prices while minimizing environmental impact in the generation and use of electricity. Ms. Chiu emphasized that the Government had an open-mind on the future development of the electricity market and welcomed views on the issues highlighted and options identified in the Consultation Document as well as any other related issue. Comments collected in the Stage I consultation would be taken into account in formulating the proposed framework for the future development of the electricity market, on which the views of the public would be sought again during Stage II of the consultation exercise. She also stressed that in working out the future arrangement, it would be necessary to strike a balance between various interests including the consumers, the market participants as well as the impact on the environment.

6. A Member commented that electricity tariff rate in Hong Kong was far too high. He pointed out that the electricity market in the Mainland, in particular that in Guangdong, had grown very fast. He considered that Hong Kong should pursue interconnection by importing electricity from the Mainland so as to enjoy lower tariff rate. Another Member shared his view. Ms. Miranda Chiu pointed out that at present there was interconnection between Hong Kong and the Mainland for the import of electricity generated by the Guangdong Daya Bay Nuclear Power Station into Hong Kong and the export of electricity from CLP Power Hong Kong Ltd. (CLP Power) to Guangdong and Shekou. She stressed that the Administration appreciated the potential benefits of increased interconnection with the Mainland in the long run. However, the current supply situation was tight in the Mainland. This taken together with the substantial demand arising from the rapid growth in economic activities expected in the next few years in Guangdong in particular suggested that availability of surplus electricity in the Mainland for supply to Hong Kong would be unlikely in the short-term. Moreover, detailed and careful consideration with regard to the necessary infrastructure would be required if interconnection were to be enhanced to ensure that reliability and stability in electricity supply would not be affected. The Administration would monitor closely developments in the Mainland and keep in view possible sourcing opportunities for Hong Kong.

7. A Member considered the level of reserve capacity of the local power companies too high and their efforts to promote demand-side management not adequate. Ms. Miranda Chiu explained that the reserve margin at around 30% was based on the loss of load probability formula which

was an internationally accepted formula. The calculation had to take into account a number of factors including electricity demand and pattern, loss of generation probability and availability of backup power supply. Ms. Chiu added that electricity was a very special commodity in that step-up and increase in output during generation had to be progressive and the electricity produced could not be stored. As such, a reserve margin was important for ensuring reliable and stable electricity supply. The reserve margin in Hong Kong was not unreasonable when compared with the situation overseas. The Member opined that the power companies could introduce a rebate system to encourage the public to consume less electricity during peak hours so as to manage the demand of electricity and minimize the need for reserve. She considered that an independent agent should be set up to pursue demand-side management because the power companies lacked the incentive to encourage their customers to save energy. Another Member suggested that the Government might consider giving the power companies incentives to set demand-side management targets, like the practice in British Columbia. Moreover, the return on investment could be linked to performance on efficiency rather than fixed assets.

8. A Member was pleased to note that the Government accorded high priority to environmental protection in mapping out the new scheme. Though there were criticisms on the existing scheme, the Territory enjoyed a high level of supply reliability at competitive tariff rate which was a key factor for Hong Kong's economic development. The Administration should be cautious in taking forward the reform. Nonetheless, he considered that the power companies should further enhance its cost-effectiveness and pursue more environmental-friendly means of production. Ms. Miranda Chiu assured Members that the Government would not introduce changes for the sake of change. Reliability and stability in electricity supply were of paramount importance.

9. In response to a Member's enquiry on the impact of proposed emission caps on the sustainability of electricity supply, Ms. Miranda Chiu said that it would be necessary to work closely with the power companies with regard to measures and new technologies that aim at achieving emission reduction target as well as ensuring sustainability and efficiency. Multiple supply sources and diversity in fuel mix could enhance supply reliability. In this connection, the Government would consider alternative supply sources such as renewable energy, provided that supply reliability would not be compromised and were affordable to consumers.

10. A Member suggested that the new scheme should include a target for electricity generation by renewable energy. Given that the investment and cost of power generation by renewable energy would be higher, the Government should consider giving financial incentives to encourage the development and use of renewable energy by the power companies. In addition, consumers should be given the choice to opt for the

use of power generated by renewable energy at reduced tariff by bearing the possibility of reduced reliability, similar to the practice in Florida. He considered that power generation by renewable energy in Hong Kong had proved to be technically feasible but incentives should be given for further development and use. The Chairman agreed and commented that stability of power supply might not necessarily be compromised as renewable energy was currently included in the grid. Ms. Miranda Chiu explained that providing financial incentives would have implications on the Government's established policy of no government subsidy for business endeavours. However, she emphasized that Members' views would be taken into consideration in formulating the future regime.

11. A Member pointed out that Guangdong had the best wind resource which was a good alternative source of supply from the Mainland. Two Members shared her view and urged the Government to seriously consider importing electricity from the Mainland. Another Member hoped that while pursuing interconnection with the Mainland, some basic principles such as clean energy and generation by environmental-friendly ways should be ensured. Otherwise, Hong Kong would be exporting pollution on a regional and even global basis by importing electricity.

12. To encourage the use of renewable energy as well as introducing more competition, a Member considered that third-party access to the power grid should be allowed. Ms. Miranda Chiu pointed out that third party access was an issue raised in the Consultation Document. In response to the Member's question of performance indicator in the current SCAs, Ms. Chiu said that the Government had not stipulated any specific performance benchmark on supply reliability but the power companies were required to provide reliable and safe electricity supply at the lowest possible price.

13. A Member enquired whether the data shown in Chapter 2 of the consultation paper indicated that the Hongkong Electric Company Ltd. (HEC) was less efficient in operation as compared with CLP Power. Ms. Miranda Chiu pointed out that, among other things, the client profiles of the two power companies were very different. Most of the clients of HEC were commercial users who operated in peak hours and whose demands for supply were almost simultaneous and concurrent. The client profile for CLP Power was much more diverse, hence the demand for electricity would be more evenly spread out.

14. With regard to the institutional set-up and regulatory arrangement, a Member enquired about the experience in opening up the grid and enhancing competition in the telecommunication field. Another Member suggested the Government consider, as in the Mainland, separating generation plants from transmission and distribution networks in order to encourage competition. He also drew reference to the telecommunication market. A Member considered institutional change necessary. He considered the

operation of the two power companies under the existing SCAs similar to a monopoly. By bringing in new players and enhancing competition, he believed that the high tariff problem, particularly that of HEC, could be resolved. Ms. Miranda Chiu explained that the electricity market was very different from the telecommunication market in that the latter had a franchise which the Government had bought back. However, the SCAs were neither franchises nor special licences and no geographical allocation was specified. Interested parties were at liberty to enter the electricity market if they wished. Nevertheless, new suppliers had yet to emerge probably due to constraints in the electricity supply industry such as intensive capital investment and long payback period. A Member thought that the current institutional set-up of having different bureaux and departments to perform different regulatory functions was undesirable. She considered that a single agency should be established for more effective coordination and implementation of energy policy.

15. A Member expressed his concern about the possible environmental impact resulting from enhanced competition as the power companies would need to develop substantial additional generation facilities to cater for the demand of the increased service areas. If this were the case, the Government should devise some criteria for justifying the need for building new generation plants. He also commented that the existing SCAs had given too much weight to economic considerations. He urged the Government to develop a framework for achieving clean energy and energy conservation. Another Member suggested the Government consider introducing a punitive tax based on the amount of pollution from power generation so as to encourage the use of cleaner energy.

16. A Member expressed his concern about the CLP Power's proposal for choosing Soko Islands as one of the potential sites for building its new Liquefied Natural Gas (LNG) terminal. He considered the company should build the new terminal near its existing LNG pipeline in Hainan Island. He also enquired whether the current SCAs covered investment of the power companies made outside Hong Kong for electricity supply to Hong Kong. Ms. Miranda Chiu said that part of the pipeline from Hainan was covered by the existing SCA. The Government had not received any formal proposal from CLP Power for a new LNG terminal. As regards CLP selling of surplus electricity to the Mainland, it was covered by separate arrangements.

17. A Member suggested the Government request the power companies to contribute a certain level of profit for environmental conservation work which could enhance their corporate responsibilities in protecting the environment.

18. A Member urged for higher transparency of the reform as well as in monitoring the future electricity market including tariff and auditing reviews, control of emissions in power generation and sale of electricity out of

Hong Kong.

19. The Chairman concluded that majority of the Members recognized the importance of reliability of electricity supply under the current regime but were concerned about the environmental impact brought by the generation and use of electricity. He summarized the major concerns raised by the Members as follows –

- (a) to include new features in the new Scheme, such as demand-side management, investment in environmental protection, energy conservation and use of alternative sources of supply;
- (b) to devise a sustainable energy policy for Hong Kong by giving more emphasis on the development and use of renewable energy for power supply in the long run and allowing third-party access to the grid;
- (c) to increase interconnection between the two local power companies as well as with Guangdong. When importing electricity from the Mainland, it would be necessary to ensure that the electricity was generated in environmentally acceptable ways; and
- (d) to set up a clean energy framework for comprehensive planning of the way forward for the future electricity market in Hong Kong.

20. The Chairman hoped that EDLB would further seek the views of the Council in the Stage II consultation.

21. Ms. Miranda Chiu thanked Members for their views and said that any further comments or suggestions from Members would be welcome. She also informed Members that a chat room had been set up in the EDLB website to enable open discussion with the public.

**Agenda Item 4 : Report of the 91<sup>st</sup> Environmental Impact Assessment Subcommittee Meeting**  
*(ACE Paper 5/2005)*

22. Chairman of the Environmental Impact Assessment (EIA) Subcommittee presented the report to the meeting.

23. On the Subcommittee's recommendation that the project proponent of the Kowloon Southern Link should further reduce waste, a Member suggested to add the responsibility of the project proponent to reduce the waste and litter produced by the construction workers during the construction phase.

24. Chairman and a Member of the EIA Subcommittee explained that the project proponent noted the Subcommittee's concerns about the environment and project management of the construction site as the site was in a densely developed area and a tourist center.

25. The Chairman considered that the Member's concern on reduction of waste and litter produced by the construction workers was slightly different from the recommendation in item (b) of paragraph 15 of the paper which mainly focused on reduction of construction and demolition waste. Members agreed to add the concern raised by the Member to the recommendations of the Subcommittee for onward transmission to EPD.

The  
Secretariat

(Post-meeting note: The Member's proposed recommendation had been incorporated to the Council's reply to EPD.)

26. In response to a Member's enquiry on the requirement for project proponent to have a waste management plan, Mr. Rob Law explained that for projects covered by the EIA Ordinance, project proponents were required to include management plans on the waste generated. For government projects, the paper to Public Works Subcommittee of the Legislative Council Finance Committee had to include a paragraph on waste management plan. However, waste management plans for projects not covered by the EIA Ordinance or non-government projects were not mandatory.

27. A Member considered the Subcommittee's recommendation that the design and visual impact of the project after construction should be in line with the world-class image of a tourist center seemed to touch on the architectural design of structures. Another Member clarified that the recommendation referred to the overall landscaping of the site such as tree planting and pavement design. Mr. Rob Law added that visual impact in the context of EIA covered general natural landscaping as well as impact of structures on the landscape.

28. The Chairman concluded that the Council endorsed the recommendations and suggestions of the Subcommittee.

### **Agenda Item 5 : Euro IV Emission Standards for New Light Duty Motor Vehicles**

*(ACE Paper 6/2005)*

29. Mr. W C Mok briefed Members on the proposal to tighten the emission standards of newly registered light duty vehicles and diesel private cars.



30. In response to a Member's enquiry on registration of diesel private cars in the market, Mr. W C Mok said that since the introduction of the requirement for compliance with the California emission standards in 1998, there was no record of new diesel private cars registration due to the stringent emission requirements. As to the Member's enquiry on different types of light duty vehicles, Mr. Mok said that the light duty vehicles below 3.5 tonnes were mainly goods vans while those over 3.5 tonnes were mainly lorries.

31. In response to two Members on the impact of the proposal on current car owners and vintage cars, Mr. W C Mok explained that the proposals would only apply to newly registered vehicles, thus in-use vehicles would not be affected. For imported vintage cars, they were exempted from the emission standards. In respect of the impact of the proposal on importation of second-handed petrol passenger vehicles, Mr. Mok said that the Right Hand Drive Motor Association (Hong Kong) Limited, which represented the trade of imported second-handed vehicles, had been consulted on the proposal and they had raised no objection.

32. In response to a Member's question on enforcement measures, Mr. W C Mok explained that vehicle manufacturers had to seek the approval of EPD for importing a vehicle model by submitting emission test data to prove its compliance with the emission standards.

33. A Member supported the proposal and considered it would help improve roadside air quality in the long run. He enquired about the projection on improvement of air quality after introduction of the proposal. Mr. W C Mok explained that the normal life span of a light duty vehicle was about 10 years. It would take time for the old models to be totally replaced by newly registered models before the full impact on roadside air quality could be realized. In the beginning of the introduction, it was expected that mainly pre-Euro models were replaced. There would thus be a few percent reduction in vehicular respirable suspended particulate emission a year. The corresponding reduction in nitrogen oxides emission would at most be around one percent.

34. A Member enquired whether incentives would be provided to vehicle owners to replace their vehicles by Euro IV models. Mr. W C Mok explained that the standing policy was to introduce the most stringent emission standards when compliant fuels and vehicles could be made available to Hong Kong. If adopted, the standards would be the minimum requirement. It would be unreasonable for the Government to subsidize vehicle owners to replace their in-use vehicles by those meeting only the minimum emission standards.

35. A Member welcomed the initiatives and enquired the reason for the one-year gap in introducing the new emission standards for the two different types of light duty vehicles. Mr. W C Mok explained that the time

gap was also in the European Union's implementation timetable. On the Member's enquiry on administrative costs and way forward in implementing the proposal, Mr. Mok said that implementation of the proposal would not require additional manpower resources or administrative costs. The Administration had already consulted the relevant trade associations and briefed the Panel on Environmental Affairs of the Legislative Council on the proposal. They aimed to table the proposed legislation to the Legislative Council this year with a view to implementing the proposal next year.

36. The Chairman concluded that Members supported the proposal as roadside air quality was a concern of the Council. It was also the stance of the Council that the most stringent emission standards should be adopted as and when the fuels and vehicles were available.

### **Agenda Item 6 : Any Other Business**

#### Ngong Ping Waste Water Reuse Project

37. A Member expressed that 22 March would be the World Water Day and attention would be drawn to issues of water shortage and conservation. She enquired about the latest progress of the Ngong Ping waste water reuse project as it would be a good demonstration of total water management programme. Mr. Raymond Fan said that the development project of the Ngong Ping Sewage Treatment Plant (STP) started two years ago to cope with the anticipated substantial sewage increase upon the commissioning of the cable car project and related development in Ngong Ping. To minimize environmental impacts on the water gathering ground, such as Shek Pik Reservoir and country park area, the STP was designed to provide tertiary treatment for the sewage generated at Ngong Ping. The STP was a pilot scheme for effluent reuse from sewage treatment works in Hong Kong. The treated effluent would mainly be reused for flushing public toilets and restricted irrigation. The project was in good progress and was expected to be commissioned in August 2005, before the completion of the cable car project.

38. The Member suggested and Members agreed to pay a visit to the Ngong Ping STP after its completion.

The  
Secretariat

#### Informal Meeting between Legislative Council Panel on Environmental Affairs and the Council

39. The Chairman informed Members that informal meetings between the Council and Legislative Council Panel on Environmental Affairs were held on a regular basis. It was time to arrange another round of meeting. He requested the Secretariat to take follow up action in fixing a date and consulting Members on the proposed discussion items.

The  
Secretariat

Retreat for Council Members

40. The Chairman suggested and Members agreed to arrange a retreat to enable Members to discuss in a more casual environment how the Council could work more effectively to meet challenges ahead.

The  
Secretariat

Merger of Environment Branch of ETWB and EPD

41. Members passed a vote of thanks to Mr. Rob Law who would retire from the service in early April. The Chairman informed Members that following the merger of the Environment Branch of ETWB with EPD on 1 April 2005, the Council Secretary should be upgraded from D2 to D3. He took the opportunity to thank Mr. Eric Chan for serving as the Secretary to the Council. The next meeting of the Council would be held in the new Headquarters of EPD in Revenue Tower, Wanchai. Members would be informed of the details in due course.

**Agenda Item 7 : Date of Next Meeting**

42. The next meeting was scheduled for 11 April 2005.

(Post-meeting note: The meeting on 11 April 2005 was cancelled.)