

**立法會**  
**Legislative Council**

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cleared by the Chairman)

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**Panel on Economic Services and  
Panel on Environmental Affairs**

**Minutes of joint meeting  
held on Friday, 18 July 2003 at 10:45 am  
in Conference Room A of the Legislative Council Building**

**Members present** : Members of Panel on Economic Services

Hon James TIEN Pei-chun, GBS, JP (Chairman)  
Hon Kenneth TING Woo-shou, JP  
Dr Hon Eric LI Ka-cheung, GBS, JP  
Hon Fred LI Wah-ming, JP  
Hon HUI Cheung-ching, JP  
Hon CHAN Kam-lam, JP  
\* Hon SIN Chung-kai  
\* Hon Miriam LAU Kin-yee, JP  
Hon Abraham SHEK Lai-him, JP  
\* Hon Henry WU King-cheong, BBS, JP  
Hon LEUNG Fu-wah, MH, JP

Members of the Panel on Environmental Affairs

# Hon CHOY So-yuk (Chairman)  
Ir Dr Hon Raymond HO Chung-tai, JP  
Hon Martin LEE Chu-ming, SC, JP  
Dr Hon LAW Chi-kwong, JP  
Hon Audrey EU Yuet-mee, SC, JP

(\* Also a member of the Panel on Environmental Affairs  
# Also a member of the Panel on Economic Services)

**Members absent** : Members of Panel on Economic Services

Dr Hon LUI Ming-wah, JP (Deputy Chairman)  
Dr Hon David LI Kwok-po, GBS, JP  
Hon Mrs Selina CHOW LIANG Shuk-ye, GBS, JP  
Hon CHEUNG Man-kwong  
Dr Hon Philip WONG Yu-hong, GBS  
Hon Jasper TSANG Yok-sing, GBS, JP  
Hon Howard YOUNG, SBS, JP  
Hon LAU Chin-shek, JP

Members of Panel on Environmental Affairs

Hon Cyd HO Sau-lan (Deputy Chairman)  
Dr Hon David CHU Yu-lin, JP  
Hon WONG Yung-kan  
Hon LAU Kong-wah, JP  
Hon Emily LAU Wai-hing, JP  
Dr Hon LO Wing-lok, JP  
Hon LAU Ping-cheung

**Public officers attending** : Environment, Transport and Works Bureau

Dr Sarah LIAO  
Secretary for the Environment, Transport and Works

Mr Raistlin LAU  
Principal Assistant Secretary for the Environment,  
Transport and Works (Environment)

Economic Development and Labour Bureau

Mr Stephen IP  
Secretary for Economic Development and Labour

Ms Miranda CHIU  
Deputy Secretary for Economic Development and  
Labour (Economic Development)

Electrical and Mechanical Services Department

Mr K W HO  
Deputy Director  
Electrical and Mechanical Services Department

**Clerk in attendance** : Mr Andy LAU  
Chief Assistant Secretary (1)2

**Staff in attendance** : Ms Debbie YAU  
Senior Assistant Secretary (1)1

Miss Winnie CHENG  
Legislative Assistant 5

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Action

**I Election of Chairman**

Miss CHOY So-yuk was elected Chairman of the joint meeting.

**II Policy on the development and wide-scale application of renewable energy**

(LC Paper No. CB(1)2198/02-03(01) - Information paper provided by the Administration

LC Paper No. CB(1)1484/02-03(01) - Information paper provided by the Administration for the joint meeting held on 28 April 2003

LC Paper No. CB(1)1504/02-03 - Background brief on the development of renewable energy in the context of the 2003 Scheme of Control Agreements Interim Review prepared by the Secretariat

LC Paper No. CB(1)1484/02-03(02) - Submission from Friends of the Earth

LC Paper No. CB(1)1917/02-03 - Minutes of the joint meeting held on 28 April 2003)

2. At the invitation of the Chairman, the Secretary for the Environment, Transport and Works (SETW) and the Secretary for Economic Development and Labour (SEDL) briefed members on the development of renewable energy (RE) in Hong Kong and the Government's energy policy.

Target of RE contribution to electricity demand

3. Dr LAW Chi-kwong considered the target of RE contribution to electricity demand as recommended by the Government's consultant conservative. To this end, he opined that a benchmark review should be conducted with reference to

overseas experience. Once an achievable target was set, the Administration could work on it in collaboration with other parties concerned.

4. SETW said that given Hong Kong's small size and densely populated nature, it was clear that deployment and siting of any new RE systems must take into account a range of land and marine constraints. According to the views collected during the recent public consultation on the findings of Stage 1 of the "Study on the Potential Applications of RE in Hong Kong", most respondents considered the targets (i.e. 1% in 2012, 2% in 2017 & 3% in 2022) recommended by the Government's consultant conservative. This might indicate that the public were more receptive to RE than the consultant had envisaged. She also said that as new RE technologies might emerge from time to time, the adoption of a moving target for implementation would be more desirable. The Administration would closely monitor the situation.

5. SEDL added that it was important to examine the practical and possible impacts on electricity supply reliability and tariffs when considering how RE targets should be taken in the post 2008 electricity market.

Access to the electricity grid

6. Dr LAW Chi-kwong opined that the development and use of RE should form part of the Government's energy policy. Without a clear direction from the Government, it would be difficult, if not impossible, to promote a wide scale application of RE in Hong Kong. In order to pave the way for future development of RE, a transparent interconnection charging regime, as was the case for the telecommunications market, should be put in place so that interconnection arrangements or agreements between the power companies and RE producing organizations/companies (third party) could be reached expeditiously. This would facilitate third party access to the electricity grid.

7. Mr SIN Chung-kai opined that as the peak load in summer normally occurred at a time when there was abundant sunlight, the diversity of generation fuels by means of solar energy could therefore save the need for putting excessive investment in new generating units which, in turn, could minimize the chance of a tariff increase. He asked the Administration to take this factor into account when reviewing the application of RE in Hong Kong. He also urged the Administration to put in place enabling measures to improve the access of RE schemes to the existing power grid.

8. The Deputy Secretary for Economic Development and Labour (DS/EDL) replied that the power companies had made an effort to promote RE. She said that CLP Power's customers with their own RE generating plants could apply for connection to CLP Power's electricity grid if they wished to enjoy back up or supplemental power supply from CLP. However, as additional costs would be incurred by the power company for network reinforcement to ensure system

reliability and/or provision of back up power supply for these ad hoc users, CLP levied certain charges for such grid connection, based on the principles of "Users Pay" and "no cross-subsidization". Otherwise, other CLP customers would have to bear the additional costs so incurred.

9. SEDL said that the objective of the Government's energy policy was to ensure a reliable, sufficient, safe and efficient supply at reasonable prices. This objective underlined the Scheme of Control Agreements (SCAs) that the Government had with the two power companies supplying electricity in Hong Kong. If diversification in sources of fuel supply in power generation would enhance reliability and lower the cost to consumers, this would meet the policy objective. Nevertheless, while the power companies had agreed, pursuant to the SCAs to promote the efficient use of energy, it should be noted that under the current SCAs, power companies had no obligation to generate electricity from RE sources or to offer grid access to independent RE generators. The interim review on the current SCAs scheduled for 2003 would give an opportunity for the Government and the power companies to discuss issues relating to the development of RE in Hong Kong. The Administration would also consider how RE might feature in the post 2008 electricity market review.

#### Gradual approach for implementation

10. Whilst recognizing the environmental benefits of RE, Ms Miriam LAU said that it would take a longer time to promote wind energy in Hong Kong, given the constraints identified by the Government's consultant and the community's attitude towards wide-scale installation of wind turbines in the territory. To kick start the RE programme, she opined that the Administration should concentrate its work on a few RE technologies which might be applicable at specific sites. For example, landfill gas utilized on site or solar water heating at building developments such as hotels or restaurants where a large centralized hot water system was required. With the successful launching of RE in specific areas, the Administration could then extend the programme to cover other RE technologies. In order to speed up the implementation process of RE, the Administration could consider granting subsidies to end users as appropriate.

11. SETW said that upon reviewing current technological trends and applications, and taking into account Hong Kong's local characteristics, the Consultant had identified a few RE technologies which were considered potentially feasible for wide-scale application in Hong Kong. There were high wind resource areas in Hong Kong which were potentially suitable for wind power applications. Apart from solar water heating system, photovoltaic (PV) systems could also be deployed in Hong Kong for energy production. However, given the huge investment incurred, the PV electricity generation cost would be significantly higher than conventional fossil fuel power generation technologies. To ensure the stability of energy supply of PV systems, they need to be connected to the electricity grid for back up power. The Administration would continue to monitor

the development of RE technologies for wide-scale application in Hong Kong. Meanwhile, it would discuss with the power companies to improve the access of RE schemes to the existing power grid before its wide-scale application in Hong Kong.

12. Regarding the installation of solar panels for water heating purpose at buildings such as hotels, SETW said that she had discussed the subject matter with some of the major hotel operators in Hong Kong. She understood that instead of solar panels, heat exchangers had been installed at hotels for recovering the waste heat from the air-conditioning system for water heating purpose.

Application of RE in Government projects

13. Citing the application of solar street lamps in the Mainland as an example, the Chairman commented that the Administration should take the initiative to promote the use of RE in public works projects. She asked about the details of the application of RE in Government projects and whether it was a prerequisite for Government departments to explore the feasibility of applying RE in public works projects.

14. SETW said that the Government had set energy efficiency requirements for buildings. The Government would also continue to take the lead in exploiting RE in public works projects. A list of major projects that had been or would be using RE had been provided to the Environmental Affairs Panel at its meeting held on 6 February 2003. She would provide further information on guidelines governing the use of energy efficient equipment and RE in public works projects.

Admin

Co-operation with the Mainland on the development of RE

15. Ir Dr Raymond HO pointed out that wind power might not be practicable given the space constraint in Hong Kong and other environmental problems associated with the installation of wind turbines. To this end, it might be worthwhile to consider establishing a joint venture with the Guangdong Authority to import from the Mainland electricity generated from renewable sources.

16. SETW replied that the Administration would not rule out the possibility of further co-operation with the Guangdong Authority. However, as the Guangdong Authority was still considering the issue of transmission of electricity and gas from west to east, it was not an appropriate time to initiate discussion with them on possible joint venture between the two sides.

Power pricing

17. Dr LAW Chi-kwong said that the current pricing of conventional power (which did not account for environmental and social costs) was a barrier to development of RE in Hong Kong. Indeed, RE technologies might be cheaper than

conventional fossil fuel power if these externalities were factored in the cost of electricity generation. The Chairman added that the electricity generation cost of RE would be lowered if it was developed on a larger scale.

18. SETW said that the Administration would need to strike a balance in developing RE. Apart from pricing consideration, the Administration had to consider the investment which had already placed in conventional fossil power plants, the technical feasibility of applying RE as well as land, building and other requirements. There was also a need to ascertain the community attitude towards large wind farms in the vicinity of population centres or country parks which might lead to visual impacts and planning objections. The Administration would adopt a gradual approach in taking forward the initiative to develop RE in Hong Kong.

19. The Chairman enquired about the resources earmarked by the two power companies for the development and wide-scale application of RE. In order to avoid scaring the general public that the pricing of RE was much higher than conventional power, she asked the Administration to provide the estimated electricity generation cost if 5% or 10% of the electricity demand was generated by RE.

20. SEDL replied that the Administration had provided information on the efforts made by the two power companies in allowing third party RE projects to be connected to their grids and RE projects they had taken on themselves or provided sponsorship at the last joint meeting held on 28 April 2003. The Administration would continue to encourage the companies to be more amenable to RE in the course of the 2003 interim review of the SCAs. Noting that it would be difficult, he would nevertheless request the Electrical and Mechanical Services Department to work with the Government Economist to see if it might be possible to do some rough estimates of the environmental and social costs of conventional power generation.

Admin

### **III Any other business**

21. There being no other business, the meeting ended at 11:50 am.