

**立法會**  
**Legislative Council**

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**Panel on Environmental Affairs and  
Panel on Transport**

**Minutes of joint meeting held on  
Thursday, 6 February 2003, at 2:30 pm  
in Conference Room A of the Legislative Council Building**

**Members present** : Members of the Panel on Environmental Affairs

Hon CHOY So-yuk (Chairman)  
Hon Cyd HO Sau-lan (Deputy Chairman)  
\* Dr Hon David CHU Yu-lin, JP  
\* Ir Dr Hon Raymond HO Chung-tai, JP  
Hon WONG Yung-kan  
\* Hon LAU Kong-wah  
Dr Hon LAW Chi-kwong, JP  
Hon Henry WU King-cheong, BBS, JP  
Dr Hon LO Wing-lok  
\* Hon LAU Ping-cheung

Members of the Panel on Transport

Hon Miriam LAU Kin-yee, JP (Chairman)  
Hon Abraham SHEK Lai-him, JP (Deputy Chairman)  
Hon CHAN Kwok-keung  
Hon Andrew CHENG Kar-foo  
Hon TAM Yiu-chung, GBS, JP

**Members absent** : Members of the Panel on Environmental Affairs

Hon Martin LEE Chu-ming, SC, JP  
Hon SIN Chung-kai  
Hon Emily LAU Wai-hing, JP  
Hon Audrey EU Yuet-mee, SC, JP

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Members of the Panel on Transport

Hon Albert HO Chun-yan  
Hon Mrs Selina CHOW LIANG Shuk-ye, GBS, JP  
Hon Andrew WONG Wang-fat, JP  
Hon LAU Chin-shek, JP  
Dr Hon TANG Siu-tong, JP  
Hon Tommy CHEUNG Yu-yan, JP  
Hon Albert CHAN Wai-yip  
Hon LEUNG Fu-wah, MH, JP  
Hon WONG Sing-chi

(\* Also members of the Panel on Transport)

**Public officers  
attending**

**: For item II**

Environment, Transport and Works Bureau

Mr Thomas CHOW  
Deputy Secretary (Environment)2

Mr C W TSE  
Principal Assistant Secretary (Environment)3

Electrical and Mechanical Services Department

Mr P K CHEUNG  
Chief Engineer (Gas Production & Supply)

Environmental Protection Department

Mr K HA  
Senior Environmental Protection Officer

**Attendance by  
invitation**

**: For item II**

The Hong Kong Union of Light Van Employees

Mr NG Kwok-hung  
Consultant

Mr IP Moon-lam  
Chairman

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Mr LEUNG Wai-bun  
Secretary

**Clerk in attendance** : Miss Becky YU  
Chief Assistant Secretary (1)1

**Staff in attendance** : Mrs Mary TANG  
Senior Assistant Secretary (1)2

Miss Mandy POON  
Legislative Assistant 4

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## **I. Election of Chairman**

In the absence of a quorum for the joint meeting, members agreed that the meeting be proceeded as a quorate meeting of the Panel on Environmental Affairs and chaired by Miss CHOY So-yuk. A quorum for the joint meeting was subsequently reached at 2:35 pm.

## **II. Feasibility study of introducing liquefied petroleum gas light vans and light goods vehicles in Hong Kong**

2. The Deputy Secretary for Environment, Transport and Works (Environment)2 (DSETW(E)2) briefly explained the background and the findings of the Feasibility Study on Introducing Liquefied Petroleum Gas (LPG) Light Vans and Light Goods Vehicles into Hong Kong (the Study) by highlighting the salient points in the Administration's paper.

Meeting with the Hong Kong Union of Light Van Employees  
(LC Paper No. CB(1) 842/02-03(01))

3. Mr IP Moon-lam, Chairman of the Hong Kong Union of Light Van Employees (the Union), said that the Union was not convinced of the findings of the Study, which concluded that the introduction of LPG light vans and LPG light goods vehicles was not practicable given the inadequate LPG filling supporting infrastructure and LPG storage terminal facility as well as the risk involved in stretching the LPG throughput. He pointed out that there was also problem of inadequate filling supporting infrastructure when the LPG Taxi Scheme was first introduced where there were only four LPG filling stations in service. However, with the concerted efforts of the Administration and the trades, the number of filling stations quickly increased and there were currently 41 LPG stations in operation. The concern about vehicle maintenance could also be resolved through training and provision of more technicians.

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As regards the risk involved in stretching LPG throughput, this had already existed when LPG taxis and light buses were first introduced.

4. Mr IP added that members of the transport trade had all along been supportive of measures to improve air quality, and had extended their co-operation in facilitating the implementation of both the LPG taxi and LPG light bus schemes. He urged the Administration to review the findings of the Study. If it was not practical to implement the conversion scheme for LPG light vans and LPG light goods on a full scale, consideration could be given to implementing it in phases. He stressed that unless the Administration had a hidden agenda that the trade was unaware of, there should not be any insurmountable difficulties which hinder the introduction of LPG light vans and LPG light goods vehicles.

5. Mr NG Kwok hung, Consultant of the Union echoed that there was inadequate filling supporting infrastructure when the LPG Taxi Scheme was first launched, but the Administration was able to overcome all the obstacles. He failed to see why the introduction of LPG light vans and LPG light goods vehicles could not be proceeded given that the infrastructure was already in place. He criticized the Government for changing its stance and leaving out the conversion plan for light vans and light goods vehicles. He further questioned the accuracy of the findings of the Study which estimated that the introduction of LPG light vans and LPG light goods vehicles would only bring about 1% reduction in particulates as opposed to 20% to 30% under the LPG Taxi Scheme. He cautioned that consultancy studies were often unreliable as seen from previous experience. He held the view that the Administration was using the findings as an excuse to shelve the conversion plan for light vans and light goods vehicles.

6. As regards the mandatory requirement of retrofitting emission reduction devices for pre-Euro models, Mr NG pointed out that this was only a short-term solution to the problem of particulates. The replacement of existing diesel light vans and light goods vehicles with the cleaner Euro III or IV models was also very expensive and not cost competitive as compared to LPG models.

7. Responding to Ms Miriam LAU on the need for subsidy to encourage the switch to LPG vehicles, Mr NG said that the trade would indeed welcome the provision of subsidy, but they would go ahead for the switch if their vehicles were due for replacement even in the absence of subsidy. He stressed that the trade had all along been reasonable and co-operative. While appreciating that there were practical difficulties in implementing the switch to LPG light vans and LPG light goods vehicles in full scale, the trade remained of the view that consideration should be given to implementing it in a phased manner, starting with the replacement of older and more polluting vehicles.

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Meeting with the Administration

(LC Paper No. CB(1) 842/02-03(02) — Paper provided by the Administration)

8. With the consent of the Chairman, DSETW(E)2 took the opportunity to respond to some of the points raised by the Union. He stressed that there was no hidden agenda on the part of the Administration. The main reason for not proceeding with the conversion scheme for LPG light vans and LPG light goods vehicle was that it was not practicable to do so. While the number of LPG stations would increase from the current 41, including 12 large-scale dedicated LPG stations, to 42 in March/April this year when the filling station in Tai Po Road came into operation, and to 44 by the end of this year, the existing filling infrastructure with about 300 LPG nozzles would only be able to support the fleet of 18 000 taxis and 6 000-odd light buses after they had switched to LPG vehicles. It would not be able to support the fleet of light vans and light goods vehicles if they were changed to LPG models. Even if the conversion was to proceed in phases as proposed to replace the pre-Euro diesel models only, this would involve 21 000 lights vans and 18 000 light goods vehicles and require an addition of 180 to 200 LPG nozzles. Given that the number of LPG nozzles for use in filling stations had been optimized, further expansion of the filling network was very limited. The additional provision of six or seven filling stations could only make available 20-odd nozzles which would be far from adequate to serve the enlarged fleet. As regards the availability of vehicle repair centres for LPG vehicles, DSETW(E)2 advised that this was not a major problem since there were many vacant industrial buildings suitable for conversion for such purposes.

Impact on air quality

9. Mr LAU Kong-wah considered the decision to shelve the introduction of LPG light vans and LPG light goods vehicles a policy change which was at variance with the Chief Executive's pledge in his earlier policy address to improve the air quality. In reply, DSETW(E)2 said that the Chief Executive had pledged in his 1999 Policy Address to introduce a package of measures, including the LPG Taxi Scheme, the feasibility of introducing LPG light buses and the scheme for retrofitting of pre-Euro models with emission reduction devices, to improve air quality. The package of measures did not include replacement of diesel light vans and light goods vehicles with LPG models. The target was to reduce particulates and nitrogen oxides emissions from vehicles by 80% and 30% respectively by 2005. At present, the Administration had been able to put most of the measures in place and achieve a 58% reduction in particulates and 26% reduction in nitrogen oxides. With more light buses being switched to LPG and more diesel vehicles replaced by Euro III models in the coming years, the Administration was confident that the target improvement as set out in the 1999 Policy Address could be achieved by 2005.

10. Ms Miriam LAU queried the Administration's commitment in improving air quality through the introduction of more environmentally friendly vehicles. By way of illustration, the Administration was very keen to take the LPG Taxi Scheme forward when it was first introduced. The conversion was mandatory and expeditiously

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implemented on a full scale. When it came to the LPG Light Bus Scheme, the conversion was voluntary with incentives to encourage the switch on the ground that there were no available filling stations along the routes of some of the light buses. Now, the Administration had decided not to proceed with the introduction of LPG light vans and LPG light goods vehicles.

11. Mr LAU Kong-wah recalled that the Administration had highly advocated the LPG Taxi Scheme which was said to bring about much reduction in particulates. As it turned out, the Scheme was very well received and marked improvement in air quality was made. He therefore questioned the accuracy of the information provided by the Administration, which said that the introduction would only bring about 1% reduction in particulates. Dr David CHU echoed that as marked improvement in air quality had been made from the switch from diesel to LPG for the 18 000 taxis, greater improvement could be expected from the switch for the 68,500 light vans and light goods vehicles. He asked why a phased introduction could not be considered.

12. DSETW(E)2 explained that the emission standard for newly registered vehicles was Euro II when the LPG Taxi Scheme was launched in 1997. The emission standard now was Euro III which was expected to be further tightened to Euro IV in 2006 in parallel with the European Union. Given that the normal life span of a diesel light van or light goods vehicle was around 10 to 12 years, and that the average age of the existing diesel light vans and light goods vehicles was about seven years, it was expected that most, if not all, of the existing more polluting pre-Euro diesel light vans and light goods vehicles, which were now already over eight years old, would either retire or would be replaced by the more environmentally cleaner Euro III or IV models within five years' time. As such, the improvement to be brought about through the introduction of LPG light vans and LPG light goods vehicles five years from now would be small. At members' request, DSETW(E)2 undertook to provide the percentage contribution of particulates by diesel light vans and light goods vehicles.

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LPG filling support infrastructure and storage facility

13. Ms Miriam LAU however pointed out that under the prevailing economic climate, owners would likely use their vehicles well beyond the normal life span. In this way, the expected improvement to air quality could not be achieved. She then enquired about the improvement which the introduction of LPG light vans and LPG light goods vehicles alone could bring about. DSETW(E)2 advised that apart from an increase in the number of filling stations to serve the fleet of LPG light vans and LPG light goods vehicles, a new LPG storage facility would have to be built which would take at least five years to complete. Assuming that the problem of inadequate filling and storage infrastructure could be resolved, and that the introduction of LPG light vans and LPG light goods vehicles could be proceeded on full scale before 2005, the estimated reduction in particulates was about 5%. As there were no means through which the problem of inadequate LPG filling supporting infrastructure could be resolved in the foreseeable future, it would be irresponsible on the part of the Administration to push ahead with the switch to LPG light vans and light goods

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vehicles.

14. Ms LAU was not convinced of the Administration's response. She pointed out that with the present provision of 43 filling stations and the fact that not all diesel light buses had been switched to LPG, the LPG filling stations should have spare capacity to serve more LPG vehicles, including LPG light vans and LPG light goods vehicles, particularly after off-peak hours when taxi drivers had already changed their shifts. DSETW(E)2 noted that at present, only 300 existing light buses had been replaced. Of these, 80% were switched to LPG models while the rest to Euro III models. Hence, some of the LPG filling stations might still have spare capacities. However, the situation would change in the next year or two when more light buses were switched to LPG models in the run-up to the expiry of the financial incentives in 2005.

15. Mr Andrew CHENG said that the fuel market would quickly adjust itself to meet the changing demand if the existing 68 500 diesel light vans and light goods vehicles were to switch to LPG, as in the case with the LPG Taxi Scheme. The Administration would be able to overcome the shortfalls in LPG filling and storage capacity if it was committed to do so. He therefore supported the phased introduction of LPG light vans and LPG light goods vehicles. In reply, DSETW(E)2 reiterated the constraints in expanding the LPG filling network. He said that as LPG had a higher inherent risk than diesel and petrol, LPG filling stations would have to meet more stringent safety requirements, including a buffer zone of 50 metres from residential developments and 15 metres from industrial/commercial developments. Only some existing petrol filling stations could be retrofitted with LPG filling facilities.

Other alternatives

16. The Chairman said that if it was not practicable to introduce LPG light vans and LPG light goods vehicles, it might be worthwhile to consider providing financial incentives to encourage the switch to cleaner Euro III/IV models in an attempt to improve the air quality. DSETW(E)2 advised that of the 68 500 diesel light vans and light goods vehicles, half of them were aged 8 years or above while some of them were aged 12 years. In other words, they would be due for replacement soon and hence there was no reason why the Administration should provide incentives for their replacement.

17. Given that the environmental performance of Euro models was comparable to LPG models, Mr LAU Ping-cheung questioned the need for the mandatory switch from diesel to LPG taxis in the first place. He asked whether consideration could now be given to offering taxi owners a choice to switch to either LPG or Euro III/IV models. While acknowledging that the environmental performance of an Euro IV vehicle would be very close to a LPG vehicle, and that its performance was much better than an Euro III vehicle, DSETW(E)2 pointed out that these models were not available in the market when the LPG Taxi Scheme was first launched in 1997. It was not until 2001 when the cleaner Euro III was introduced. In view of the

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deteriorating air quality, measures were then required to reduce roadside pollution, in particular vehicular emissions which contained high levels of particulates and nitrogen oxides. With the introduction of the LPG Taxi Scheme, there had been marked improvement in air quality and the level of particulates in 2002 had been reduced by 19% as compared to that in 1999. Since it was a statutory requirement for newly-registered taxis in Hong Kong to be fuelled with LPG or petrol, they could no longer be able to be replaced by diesel models.

18. Ir Dr Raymond HO criticized the lack of vision and inconsistency on the part of the Administration in implementing its fuel policy, as evidenced in the switch from diesel to petrol and later to LPG when it was well aware that cleaner Euro models would be introduced soon. DSETW(E)2 affirmed that it had all along been the Government's policy to promote cleaner fuel where practicable. Before any fuel conversion schemes were introduced, the Administration had to make sure that there was adequate filling supporting infrastructure so that the public as well as the trade would not be unnecessarily inconvenienced by the proposed conversion. He reiterated that the Administration could not proceed with the switch to LPG light vans and LPG light goods vehicles because it was not practical to expand the existing LPG filling supporting infrastructure to meet with the demand arising from the switch.

19. Noting that the emission standard of newly registered vehicles would be tightened from Euro III to IV in 2006, Ir Dr HO questioned the need for making the retrofitting of emission reduction devices for pre-Euro models a statutory requirement. DSETW(E)2 advised that the reason for making the requirement mandatory was to make sure that vehicle owners would not remove the device after it had been installed. So far, 80% of the pre-Euro models had been retrofitted. Given that there would be quite some time before the tightening of emission standard in 2006, the Administration considered it worthwhile to introduce the legislative changes in mid 2003 for implementation in late 2003.

Financial implications

20. Mr LAU Kong-wah queried whether the decision to shelve the switch to LPG light vans and LPG light goods vehicles was due to the mounting budget deficit which had resulted in a half-way house for the conversion plan. Ms Miriam LAU echoed that such a decision had to do with the loss in revenue since duty was imposed on diesel but not on LPG. She opined that there was no need for the Administration to use impracticality as an excuse to justify whether the loss in revenue should be outweighed by the environmental cost incurred from the switch which should be for the public to decide. Her views were shared by the Chairman and Mr LAU Ping-cheung.

21. DSETW(E)2 clarified that the decision of not to proceed with the switch to LPG light vans and LPG light goods vehicles had nothing to do with the budget deficit and in fact, the subject had not been raised with the Financial Services and the Treasury Bureau. He reiterated that the Administration was committed to promoting



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the use of cleaner fuel whenever it was feasible to do so. The provision of adequate LPG filling supporting infrastructure had all along been a problem since the LPG Taxi Scheme was first launched. Given the land constraints and the difficulty in identifying suitable sites for LPG filling stations, further expansion of the filling network was limited and would not be able to serve the additional fleet of LPG light vans and LPG light goods vehicles. At members' request, DSETW(E)2 undertook to provide the amount of revenue loss if all diesel light vans and light goods vehicles were switched to LPG.

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22. Dr LAW Chi-kwong welcomed the shelving of the switch to LPG light vans and LPG light goods vehicles as he had reservations on their safety, energy efficiency and potential of development. He however pointed out that the findings of the Study was too broad brushed and the justifications were unconvincing. The estimates were based on assumptions and there was no analysis on the alternative of using cleaner Euro III or IV models. Information such as LPG storage capacity, annual LPG demand, feasibility of phased implementation etc was left out in the Study. DSETW(E)2 said that detailed information as requested by Dr LAW had been provided in the full report which had been deposited with the Legislative Council Secretariat. He nevertheless agreed to provide details on LPG storage and annual LPG demand for members' information.

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**III. Any other business**

23. There being no other business, the meeting ended at 3:45 pm.

Council Business Division 1  
Legislative Council Secretariat  
17 March 2003