

**For information**

**13 June 2002**

**Legislative Council  
Panel on Environmental Affairs  
Panel on Transport**

**LIGHT BUSES USING CLEANER FUEL**

**INTRODUCTION**

This paper updates Members on developments regarding the proposed incentive scheme to encourage owners of diesel light buses to replace their vehicles early with ones that are run on liquefied petroleum gas (LPG) or electricity.

**BACKGROUND**

2. In November last year, we consulted Members on a proposed incentive scheme to encourage owners of diesel light buses to replace their vehicles early with LPG or electric ones. The details of the proposed incentive scheme are repeated at the Annex for Members' easy reference. We have since held a number of meetings with the light bus trade to gauge their views on the proposed incentive scheme.

**CONSULTATION WITH LIGHT BUS TRADE**

3. The following main points emerged during the consultation –
- (a) The proposed one-off grant of \$60,000 for each replacement LPG public light bus (PLB) is not sufficiently attractive to the trade whose business is suffering due to the current economic situation. The grant should be increased to offset partly the higher maintenance costs of LPG light buses and the operating loss that would be incurred by operators whose routes are of some distance from LPG stations since

they would have to stop operating while refilling. The grant should be increased also to compensate PLB owners who replace their vehicles before their vehicles reach normal retirement age. Some suggested increasing the grant to \$80,000, while others felt it should be increased to \$150,000;

- (b) Euro III diesel PLBs are also environmentally friendly. Therefore, a one-off grant should also be offered for replacing existing vehicles with Euro III diesel PLBs. Some suggested that the grant should be the same as for a replacement LPG PLB, while others thought that it could be slightly lower;
- (c) The proposal to offer only first registration tax (FRT) exemption for replacing private school light buses is unfair. Owners should be offered the same one-off grant as PLB owners since their vehicles are equally polluting. Indeed, there is a stronger case for private school light buses since they operate mainly in school areas and affect school children who are more vulnerable to pollution than adults;
- (d) Government should ensure continued supply of diesel light buses since the proposed scheme is voluntary;
- (e) Government should ensure the supply of more than one LPG light bus models to prevent any vehicle manufacturer monopolizing the LPG light bus market; and
- (f) Government should extend the deadlines of application for the incentives so that more owners of diesel light buses could replace their vehicles under the incentive scheme. The extension would also allow diesel light bus owners longer time to study the actual performance of different LPG light bus models in Hong Kong before deciding which one to choose. Some suggested that the deadline for diesel light buses be set at two years from the date of completion of the last LPG filling station, while others felt that there should not be any deadlines at all.

## **ASSESSMENT OF VIEWS**

4. After carefully considering the views summarized above, we have the following comments -

- (a) The proposed one-off grant of \$60,000 taken together with the much lower price of LPG should be reasonably attractive to PLB owners whose routes are within the vicinity of LPG stations. Since we announced the proposed incentive scheme last November, LPG has become even cheaper. In November last year, we estimated on the basis of the then prevailing LPG prices of \$2.00 to \$2.38 per litre and motor diesel price of \$5.84 per litre that about 68% of PLB operators would enjoy a net income increase between \$1 and \$3,000 a month if they replaced their diesel PLBs with LPG ones. The remaining 32% would face net income reduction between \$1 and above \$3,000 a month. With the change in prices of motor diesel and LPG since then (current motor diesel price has slightly increased to \$5.87 per litre while LPG price has been reduced to \$1.85 to \$2.1 per litre), we estimate that 81% of the PLB operators would experience a net income increase between \$1 and over \$3,000 a month and the remaining 19% would experience a net income reduction between \$1 and \$3,000 a month. PLB owners who will suffer recurrent operating loss after switching to LPG light buses will not take advantage of the replacement programme. We acknowledge that fuel prices and consequently the savings in fuel cost do change from time to time. However, the experience so far is that the price of LPG at dedicated LPG stations (where 73% of the LPG taxi fleet currently get their fuel from), the maximum of which is determined by a formula in the Administration's contracts with their operators, has been leading the LPG market. The price of LPG at all refilling stations has been stable despite increases in the prices of motor petrol and diesel. With regard to maintenance requirements, the trial programme on LPG light buses as reported to Members previously revealed that the maintenance requirements of LPG and diesel light buses are similar. Furthermore, since the objective of the proposed scheme is to encourage early replacement, compensation for pre-mature retirement of existing diesel

light buses is not relevant;

- (b) Euro III emission standard is effectively the minimum standard that all newly registered vehicles have to meet. Therefore, there is no justification for offering any incentive to owners of replacement Euro III diesel PLBs. In any case, an LPG light bus emits almost zero particulates and only 50% of the nitrogen oxides of a Euro III diesel light bus;
- (c) Operators of LPG private school light buses have more flexibility in refilling as most of them do not run schedules as intensive as PLB operators. Also, as financial resources are limited, we should make the best use of public funds to achieve the greatest possible environmental results. We should deploy the limited financial resources on replacing diesel PLBs which contribute to 80% of the emission from the diesel light bus fleet;
- (d) There are currently three choices of diesel light buses: Mitsubishi, Mercedes-Benz and Volkswagen. They all meet Euro III emission standard. So owners who do not take advantage of the incentive would still have a range of diesel vehicles to choose from;
- (e) Toyota was the only manufacturer selling LPG light buses in Hong Kong when we announced the incentive scheme late last year. Mercedes-Benz has since started to sell LPG light buses and the first two that meet our standards will arrive in Hong Kong later this month. Taken together with (d) above, owners will have a choice of diesel and LPG models;
- (f) To encourage early replacement, we set the deadline of end-2003 for application for the incentives by owners of older diesel light buses and that of end-2004 for owners of younger light buses. The request of the trade for extending the deadlines is not unreasonable. We would extend the deadlines by one year on the following grounds –
  - (i) light bus operators will have more time to study the performance of different models of LPG light buses before deciding which one to choose;

- (ii) owners of diesel light buses will have similar length of time to apply for the incentives as diesel taxi owners in the diesel taxi replacement scheme. In fact, owners of older diesel light buses will have one more year than owners of older diesel taxis to apply for the incentives; and
- (iii) an extension would allow those who own younger light buses more time to let their vehicles run to the end or closer to the end of their technical life before replacing them with LPG or electric light buses.

5. We have carefully considered the suggestion of some in the light bus trade of setting the deadline at two years from the completion of the last LPG filling station. We do not see the basis for it, as what matters to the PLB trade is the geographical location of LPG stations, i.e. how convenient the LPG stations are to them, but not the number of LPG stations. In terms of numbers, 34 LPG stations are currently in operation. This will gradually increase to at least 43 including three new dedicated stations by around 3<sup>rd</sup> quarter of this year. In terms of refilling capacity, the provision of 43 LPG filling stations would adequately serve the entire LPG taxi fleet and over 97% of the entire public and private light bus fleet. Additional LPG filling stations that will come on stream over the next few years will also continue to improve the geographical coverage and refilling capacity for LPG light buses.

6. Under the foregoing assessment, the only change that we would make to the proposed incentive scheme is to extend the deadline of application for the incentives -

- (a) from end-2003 to end-2004 for owners of existing diesel light buses aged 10 or above at the time of de-registration; and
- (b) from end-2004 to end-2005 for owners of existing diesel light buses below 10 years old at the time of de-registration.

## **RELAXATION OF LIGHT BUS WEIGHT**

7. Transport Department (TD) has already advised the light bus trade of its decision to relax the weight limit on light buses from 4 to 5.5 tonnes. This will facilitate the entrance of more light bus models into the Hong Kong market. TD will take action to introduce the necessary legislative changes in due course to formalize the arrangement. In the meantime, TD will grant exemption administratively to allow registration of light buses exceeding 4 tonnes.

## **WAY FORWARD**

8. We plan to seek funding approval from the Finance Committee within this legislative session for the one-off grants so as to start the incentive scheme as soon as possible.

9. As at 31 May 2002, 156 LPG light buses (of which 136 are PLBs) have been licensed and are running on the road. The proposed incentive of the one-off grants will be made available to owners who have already replaced their diesel public light buses with LPG or electric ones before the Government starts accepting applications for the incentive.

**Environment and Food Bureau**

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## **Proposed Incentive Scheme Announced in November 2001**

### **Public Light Buses (PLBs)**

- Owners of existing diesel PLBs who replace their vehicles with an LPG model will be offered a one-off grant of \$60,000.
- Owners of existing diesel PLBs who replace their vehicles with an electric model will be offered a one-off grant of \$80,000. (Electric public light buses are already exempt from First Registration Tax).

### **Private Light Buses**

- Owners of existing diesel private light buses who replace their vehicles with an LPG model will be offered First Registration Tax (FRT) exemption (equivalent to 4% of the taxable value of the new light bus).

(Electric private light buses are already exempt from FRT.)

### **Deadlines of application**

- To be eligible for the one-off grant or FRT exemption, owners of diesel public and private light buses aged 10 or above at the time of de-registration must replace their vehicles by end-2003. Owners of diesel public and private light buses below 10 years old at the time of de-registration must replace their vehicles by end-2004.
- The one-off grant and FRT exemption will be made available to owners who have already replaced their diesel public or private light buses with LPG or electric ones before the Government starts accepting applications for the incentives.