For information on
11 December 2001

Legislative Council
Panel on Environmental Affairs
Panel on Transport

Light Buses Using Cleaner Fuel
Further Information

Introduction

This paper provides the information requested by Members relating to the Administration's proposal to encourage light buses to use cleaner fuel.

Background

2. We consulted the LegCo Panels on Environmental Affairs and Transport on the Administration's proposal to encourage light buses to use cleaner fuel on 26 November 2001. At the meeting, Members requested the Administration to provide the following information -

(a) a table showing the difficulties in respect of cost, income and emission, etc. which the 32% of public light bus (PLB) operators will experience if they replace their existing light buses with Euro III diesel and LPG models;
(b) names of manufacturers of LPG light buses and the timeframe within which they will make available their vehicles to the Hong Kong market to meet the surge in demand;
(c) measures which the Administration will take to ensure a balance of interests among the manufacturers, owners and operators of PLBs upon the switch; and
(d) a map showing the locations of LPG filling stations.

The 32% of PLB operators

3. According to a route-by-route analysis conducted by the Transport

Department, 68% of the PLB operators will experience a net income increase from a marginal amount to $3,000 a month if they replace their diesel PLBs with LPG ones. The remaining 32% will face net income reduction from a marginal amount to above $3,000 a month because of loss in business time owing to longer travelling distances for refilling and more frequent refillings. The following table sets out the estimated changes in capital cost, recurrent income and emission of the 32% PLB operators if they replace their existing diesel PLBs with LPG or Euro III diesel models -

	Switch to LPG Light Buses	**Switch to Euro III Diesel Light Buses**
Capital Cost	An LPG PLB costs about $360,000 which is about $33,000 more expensive than the cheapest Euro III diesel model now available in the market. However, with the proposed one-off grant of $60,000, operators would have a net gain of about $27,000 if they opt for an LPG light bus, assuming the current price differential between the two types of light buses.	A Euro III diesel PLB costs about $327,000 to $400,000 (depending on the makes). By way of comparison, the cost for a popular Euro II model which however is no longer available for sale was about $342,000.
Recurrent Income	Of the PLBs (32% of total) which are expected to experience a net income reduction if they switch to use LPG, about 20% may have a net monthly income reduction of a marginal amount to $1,000; about 7-8% a monthly reduction of $1,001 to $2,000; about 4% of a monthly reduction of $2,001 to $3,000; and about 1% a monthly reduction of $3,001 or more.	The mode of operation will be similar to present. There should not be any significant difference in recurrent income.
Emission	An LPG PLB emits almost zero particulates (RSP) and 50% less Nitrogen Oxide (NOx) than a Euro III diesel PLB.	A Euro III PLB emits 35% and 30% less RSP and NOx respectively than a Euro II one, although a Euro III PLB emits substantially more RSP and NOx than a much cleaner LPG PLB.

LPG Light Bus Availability

4. The following table sets out information we have obtained from vehicle manufacturers who are producing or interested in producing LPG light buses for the Hong Kong market -

Vehicle Manufacturer	**Time-frame for Supplying Vehicles to Hong Kong**
Toyota	Already available. Can produce about 100 LPG light buses per month. If demand increases, can increase production capacity to 150-200 LPG light buses a month after June 2002.
Mercedes Benz	Plan to make available its LPG light bus to Hong Kong around February/March 2002.
Nissan	Interested in supplying LPG light buses to Hong Kong. Will make a firm decision soon.

5. We have already written to the Motor Traders Association of Hong Kong to urge its Members to make available more light bus models, including LPG light buses, for the Hong Kong market. With the planned relaxation of the current light bus weight limit of 4 tonnes to 5 tonnes, we expect that more vehicle manufacturers will consider supplying LPG light buses for the Hong Kong market.

Balance of Interests among Manufacturers, PLB Owners and Drivers

6. Under the proposed scheme, PLB owners may replace their vehicles with LPG, electric or diesel models, although the one-off grant would only be made available to those who replace their existing PLBs with either of the former two models. Coupled with the planned relaxation of the weight limit of light buses to 5 tonnes, the Hong Kong light bus market will provide business opportunities for more vehicle manufacturers; and hence more choices for the PLB owners. The increased competition in the light bus market, i.e. not just among different makes of one type of fuel, but also among vehicles using different fuels, would lead to more competition in vehicle price and quality.

7. As regards the balance of interests between owners and drivers of PLBs, there are different modes of commercial arrangements among owners and drivers in the PLB trade. Some owners are also drivers themselves; some owners employ drivers to operate the PLBs while some rent out their vehicles. The proposed scheme will not undermine the interests of drivers who are employees or rentees of the vehicles vis-à-vis the owners as the wages or rental are determined by market forces which is no different from the current arrangement. It is worth noting that one of the factors affecting the rental of a PLB is the age of the vehicle because a newer vehicle usually has a better performance and requires less frequent maintenance. Rentee drivers can choose to rent the type of light buses most suited to their needs and from whom they wish to rent the vehicles.

8. We have briefed and will continue to provide information about the proposed incentive scheme, LPG filling stations and LPG vehicle workshops to PLB trade associations, owners, operators as well as driver groups to facilitate their choice of owning or renting an LPG, electric or diesel PLB.

Location of LPG Filling Stations

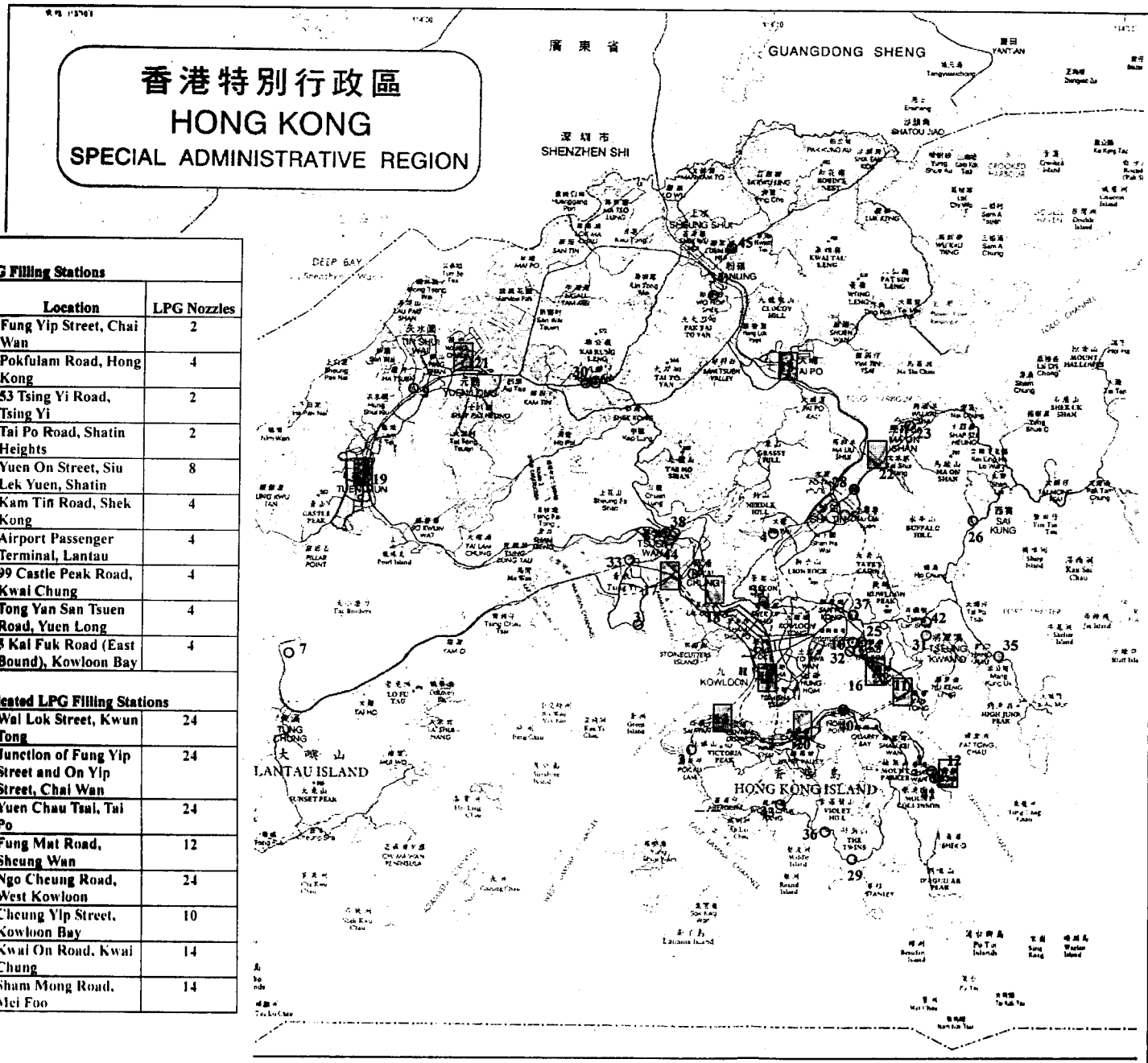
9. A map showing the locations of the existing and future LPG filling stations is at the Annex.

Environment and Food Bureau
December 2001

Annex

Locations of LPG Filling Stations

(Existing & Those under Construction or Planning) (as at 6 December 2001)



Existing LPG Filling Stations

Company	Location	LPG Nozzles
1. ECO	Fung Yip Street, Chai Wan	2
2. Caltex	Pokfulam Road, Hong Kong	4
3. CRC	53 Tsing Yi Road, Tsing Yi	2
4. Caltex	Tai Po Road, Shatin Heights	2
5. CRC	Yuen On Street, Siu Lek Yuen, Shatin	8
6. CRC	Kam Tin Road, Shek Kong	4
7. Shell	Airport Passenger Terminal, Lantau	4
8. ExxonMobil	99 Castle Peak Road, Kwai Chung	4
9. ExxonMobil	Tong Yan San Tsuen Road, Yuen Long	4
10. Shell	5 Kai Fuk Road (East Bound), Kowloon Bay	4

Existing Dedicated LPG Filling Stations

11. CRC	Wai Lok Street, Kwun Tong	24
12. ECO	Junction of Fung Yip Street and On Yip Street, Chai Wan	24
13. CRC	Yuen Chau Tsai, Tai Po	24
14. CRC	Fung Mat Road, Sheung Wan	12
15. ECO	Ngo Cheung Road, West Kowloon	24
16. CRC	Cheung Yip Street, Kowloon Bay	10
17. CRC	Kwai On Road, Kwai Chung	14
18. ECO	Sham Mong Road, Mei Foo	14

New Dedicated LPG Filling Stations

(* to be completed between now and 1st quarter of 2002)
(# to be completed by around mid-2002)

Company	Location	LPG Nozzles
19. ECO	* Yip Wong Road, Tuen Mun	10
20.	# Marsh Road, Wan Chai	10
21.	# Tak Yep Street, Yuen Long	12
22.	# Ma On Shan (near Ma On Shan Road)	12

New LPG Filling Stations

(* to be completed between now and 1st quarter of 2002)
(# to be completed by around mid-2002)

23. Shell	* On Shan Lane, Ma On Shan	4
24. ExxonMobil	* 4 Kai Fuk Road (West Bound), Kowloon Bay	4
25. ExxonMobil	* 7 Kai Fuk Road (East Bound), Kowloon Bay	4
26. ExxonMobil	* Hiram's Highway, Sai Kung	2
27. Shell	* 682 Castle Peak Road, Kwai Chung	4
28. ExxonMobil	* On Ping Street, Shek Mun, Shatin	6
29. Shell	* Stanley Village Road, Stanley	2
30. Feoso	* Kam Tin Road, Yuen Long	4
31. ExxonMobil	* Po Hong Road, Tseung Kwan O	6
32. Shell	* 8 Kai Fuk Road (West Bound), Kowloon Bay	4
33. Shell	* Tsing Yi Road West, Tsing Yi	4
34. CRC	* Yat Ming Road (near Pa Wo Road), Fanling	8
35. Caltex	* Clear Water Bay Road, Sai Kung (near TV City)	4
36. Caltex	* South Bay Road, Repulse Bay	2
37. Caltex	# Fung Shing Street, Po Kwong Village	8
38. ExxonMobil	* 698 Castle Peak Road, Kwai Chung	4
39. Feoso	# 332 Tai Po Road	4
40. Feoso	* Java Road, North Point	16
41. Feoso	* 23 Fung Yip Street, Chai Wan	4
42. ExxonMobil	* Po Lam Road, Tseung Kwan O	6
43. ExxonMobil	# Wong Chuk Hang Road, Aberdeen	4
44. ExxonMobil	* 739 Castle Peak Road, Tsuen Wan	4
45. Caltex	* Sha Tau Kok Road, Fanling (near Lung Yeuk Tau)	6