

**For discussion
on 6 November 1998**

**Legislative Council
Panels on Environmental Affairs and Transport**

A Proposal to Introduce LPG Taxis-A Consultation Paper

Introduction

The Administration has issued a consultation paper on the proposal for full scale introduction of liquefied petroleum gas (LPG) taxis to Hong Kong. The consultation period will last from 16 October 1998 to 31 December 1998.

Background

2. Diesel vehicle emissions are a major cause of air pollution in Hong Kong. Although diesel vehicles account for only about one third of the vehicle population, they account for about two thirds of the vehicle mileage travelled in the urban area. Because of their considerable mileage and high emission of particulates, they account for 98% of the respirable suspended particulates (RSP) from the entire vehicle population and half of the ambient RSP concentrations. In addition, 85% of the nitrogen dioxide emitted from motor vehicles and 60% of the ambient nitrogen dioxide concentrations are due to diesel vehicles.

3. Despite recent improvements in diesel technology, even a well maintained, state of the art diesel vehicles emits a quantity of RSP which increases with time through normal deterioration. To improve air quality sufficiently to safeguard the public health, we are determined to introduce clean practical alternatives to diesel vehicles.

4. We have studied various major clean alternative motor fuels including LPG, natural gas and electricity. In the absence of stable supply and an infrastructure for distribution and storage, natural gas vehicles are not technically and operationally feasible in Hong Kong. For electric vehicles, the technology is not yet mature enough to cope with the intensive commercial driving requirements in Hong Kong.

5. On the other hand, LPG has been found to be a clean practicable motor fuel alternative to replace diesel. LPG has a reliable supply and distribution system, having been used in Hong Kong for over 35 years. The environmental benefits of LPG vehicles are widely recognised. Over four million LPG vehicles are currently in operation in over 30 countries. Since taxis are running the highest mileage among diesel vehicles in Hong Kong, and since suitable LPG vehicles are readily available, we have given priority consideration to this category of diesel vehicles.

6. To gauge the feasibility and practicability of introducing LPG taxis to Hong Kong, a one-year trial scheme was launched in November 1997 with the support of the taxi trade, vehicle suppliers and oil companies. The trial has provided very useful operating data and feedback. LPG taxis have been demonstrated to be technically feasible in Hong Kong. To achieve the objective of improving the air quality, the full scale introduction of LPG taxis to Hong Kong is proposed. We will work to ensure that there is sufficient supply of LPG filling stations, vehicle mechanics and maintenance workshop to facilitate a successful switch of all diesel taxis to LPG taxis. We will explore with the taxi trade and relevant parties arrangements to ensure that the operating costs of LPG taxis in Hong Kong would be comparable to that of diesel taxis. We will also further study the use of LPG by other types of diesel vehicles.

7. The Administration has put forward for public discussion implementation proposals for the full scale introduction of LPG taxis and for other measures to control emissions from diesel vehicles. The proposals have been set out in a consultation document which was forwarded to Members on 16 October 1998.

Advice Sought

8. Members' advice is sought as to whether the Administration should proceed with the proposal to replace the diesel taxi fleet with vehicles that operate on LPG.

Planning, Environment and Lands Bureau
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