

**For information
March 2012**

**LEGISLATIVE COUNCIL
PANEL ON ENVIRONMENTAL AFFAIRS**

**A Proposal to Control Excessive Emissions of
Petrol and Liquefied Petroleum Gas (LPG) Vehicles**

Purpose

As requested by Members, this paper provides supplementary information on the proposal to strengthen the control of emissions of petrol and LPG vehicles. We would also like to inform Members of our proposal to extend the subsidised replacement of catalytic converters and oxygen sensors to petrol taxis and light buses, whose number now stand at six.

Background

2. We sought Members' views on 27 February 2012 ((LC Paper No. CB(1) 1119/11-12(05)) about our proposal to control excessive emissions of petrol and LPG vehicles, which include mainly the deployment of remote sensing equipment to screen out in-use petrol and LPG vehicles that emit excessively for their owners to rectify the excessive emission problem; and a one-off subsidy to help owners of LPG taxis and light buses to replace once the catalytic converters and oxygen sensors of their vehicles. While indicating no objection to the proposal, Members would like to have supplementary information on the cost breakdown of the replacement programme before the proposal is submitted for consideration by the Finance Committee, and the measures to encourage small and medium-sized repair workshops to participate in the tender exercise.

3. Noting that apart from LPG taxis and light buses, there are still some taxis and light buses that are fueled by petrol running on the road, for which frequent replacement of catalytic converters and oxygen sensors is also necessary, we would like to extend the one-off subsidy proposal to these vehicles.

Cost Breakdown of the Replacement Programme

4. We estimate that the replacement programme will cost a total of \$150 million, which includes \$131 million for the replacement work, \$17 million to cater for contingency and \$2 million for other miscellaneous expenses. Details are provided in paragraphs 5 to 6 below.

5. As at 31 December 2011, there are about 21 630 eligible petrol and LPG taxis and light buses, the majority of which belong to four models of taxi and two models of light bus. A breakdown of these vehicles by Euro standard is at Annex. We estimate that the average cost of replacing the catalytic converter and oxygen sensor (including the costs of the replacement parts and services) for a vehicle is about \$6,060. The replacement costs for around 21 630 eligible vehicles thus amount to around \$131 million.

6. We have also included in the estimate \$17 million for contingency (items (a) and (b) below) and \$2 million for other minor expenses (items (c) and (d) below) –

- (a) fluctuations in the currency exchange rates and prices of precious metals, which are key components of catalytic converters;
- (b) changes in the make-up of the taxi and light bus fleet in the run up to the commencement of the replacement scheme (e.g. increase in the number of newer taxis whose catalytic converters are more expensive, increase in number of eligible light buses, etc.);

- (c) free training courses to help vehicle mechanics to cope with the advanced emission test that include nitrogen oxides as one of the testing parameters; and
- (d) checks on the quality of replacement catalysts and oxygen sensors, etc.

Petrol Taxis and Light Buses

7. While the taxis and light buses running on the road are now predominantly fuelled by LPG, there are five petrol taxis and one petrol light bus as at 31 December 2011 according to the registration record of the Transport Department. As petrol taxis and light buses also tend to run on high mileage and require frequent replacement of catalytic converters and oxygen sensors, for consistency purpose, we propose to include them in the replacement programme as well.

Middle- and Small-sized Garages

8. To encourage middle- and small-sized garages, which taxi and light bus trades usually patronise, to take part in the tender, we will organise tender briefing to help them understand the tendering procedures and information that a tenderer needs to provide. In addition, we will provide the tender documents in bilingual version.

Advice Sought

9. Members are invited to note the contents of the paper.

Environmental Protection Department
March 2012

Annex

**Breakdown of Liquefied Petroleum Gas (LPG) and
Petrol Taxis and Light Buses by Euro standards (as at 31 Dec 2011)**

Vehicle Class	Make	Euro Standard	Vehicle Number
LPG Taxi	Toyota	EURO II	6 500
		EURO III	8 300
		EURO IV	2 400
		EURO V	960
	Nissan	EURO III	85
Petrol Taxi	Toyota	EURO IV	5
Taxi sub-total			18 250
LPG Light Bus	Toyota	EURO III	3 130
		EURO IV	250
Petrol Light Bus	Toyota	EURO II	1
Light Bus sub-total			3 381
Total			21 631