For information 25 September 2008

LEGISLATIVE COUNCIL BRIEF

Extension of application period for the early Replacement of Pre-Euro Commercial Vehicles

INTRODUCTION

This brief informs Members of the Administration's decision to extend the application period of the one-off grant scheme introduced in April 2007 to encourage the early replacement of pre-Euro diesel commercial vehicles¹ to 31 March 2010 (i.e. same as that of Euro I diesel commercial vehicles).

BACKGROUND

2. Diesel commercial vehicles² are key contributors to roadside air pollution, accounting for about 90% and 80% of the total vehicular emission of respirable suspended particulates (RSP) and nitrogen oxides (NOx). The two are the principal air pollutants at the roadside. Among diesel commercial vehicles, pre-Euro and Euro I vehicles emit about 15 to 30 times more pollutants than Euro IV ones³. To bring early relief to roadside air pollution, the Government introduced in April 2007

¹ Pre-Euro diesel vehicles were first registered before 1 April 1995 whereas Euro I vehicles were first registered between 1 April 1995 and 31 March 1997 for buses and goods vehicles over 4 tonnes, and between 1 April 1995 and 30 September 1998 for other diesel commercial vehicles.

² Diesel commercial vehicles include mainly light buses, goods vehicles and coaches.

³ Euro IV emission standards are the statutory emission requirements for newly registered vehicles.

a one-off grant scheme⁴ to encourage the early replacement of these vehicles with new vehicles. The scheme allows 18 months for pre-Euro diesel commercial vehicles⁵ to apply for the one-off grant and 36 months for Euro I diesel commercial vehicles. The shorter application period for pre-Euro diesel commercial vehicles is to encourage a quicker replacement of these more polluting vehicles and their original application deadline is due on 30 September 2008.

JUSTIFICATIONS

Extension of the Application Period for pre-Euro Diesel Commercial Vehicles

3. The overall fleet size of the diesel commercial vehicles hovered at around 120,000 over the past few years, of which about 59,000 were of the pre-Euro and Euro I categories. After the introduction of the one-off grant scheme, the numbers⁶ of pre-Euro and Euro I diesel commercial vehicles had been reduced by about 8,700 vehicles and 3,600 vehicles respectively up to July 2008. Among these vehicles, 5,234 pre-Euro diesel commercial vehicles and 2,113 Euro I diesel commercial vehicles had been replaced under the one-off grant, making up a one-off grant payment of about \$299 million.

4. However, there are still 30,000 pre-Euro diesel commercial vehicles and 17,000 Euro I diesel commercial vehicles in operation, accounting for roughly 25% and 15% of the diesel commercial vehicle fleet respectively. They still constitute a sizeable portion of the diesel commercial vehicle fleet with the oldest among them around 20 years of

⁴ In February 2007, the Finance Committee approved \$3,176 million for this one-off grant scheme. Up to the end of August 2008, about \$323 million were committed with a balance of \$2,853 million.

⁵ The application deadline for pre-Euro diesel commercial vehicles over 4 tonnes and of the body-type: lorry crane, concrete mixer, gully emptier or pressure tanker is 31 March 2010.

⁶ The comparison was made based on the licensed vehicle numbers as at Feb 2007 and July 2008.

age and the youngest around 11 years of age. If we do nothing, many of them may continue to be in operation for many more years. The overall age profile of the whole commercial vehicle fleet including vehicles of all fuel types as at July 2008 is **at Annex A**.

5. Should all the remaining pre-Euro and Euro I diesel commercial vehicles be replaced by Euro IV vehicles, the emissions of respirable suspended particulates (RSP) and nitrogen oxides (NOx) from the diesel commercial vehicle fleet will be reduced by 62% and 35% respectively.⁷ The territory-wide emissions of RSP and NOx will be reduced by about 16% and 14% respectively. The emission reduction will bring substantial improvement to roadside air quality.

6. By the end of September 2008, the one-off grant scheme will expire for pre-Euro diesel commercial vehicles. Although the one-off grant scheme for Euro I diesel commercial vehicles will continue for another 18 months, the large number of these old diesel commercial vehicles remaining on the roads, particularly the pre-Euro ones, which are more polluting, warrants extra efforts to encourage their early replacement for better roadside air quality.

7. Feedback from the transport trades indicates that the slow replacement of aged diesel commercial vehicles is mainly attributed to poor business outlook and, in particular, high oil prices. Diesel price has increased by up to about 40% after the commencement of the incentive scheme. High diesel price has made local transport operators struggling for staying in business. Most of the diesel commercial vehicle owners are thus reluctant or unable to incur substantive investment to replace their vehicles.

8. Some also argue that the one-off grant scheme commenced on 1 April 2007, only six months after the adoption of the Euro IV emission standard as the statutory standard for most of the diesel commercial

⁷ The emissions figures are based on the number of licensed vehicles as at 25 February 2008.

vehicles on 1 October 2006. As the scheme for pre-Euro diesel commercial vehicles will expire on 30 September 2008, many vehicle owners are concerned that there is not sufficient time for them to ascertain the suitability of Euro IV diesel commercial vehicles for local operation before committing themselves to replacing their present vehicles, despite the assurance of vehicle suppliers. The transport trades have thus been urging the Government to extend the one-off grant application period for pre-Euro diesel commercial vehicles.

9. Taking into account the substantial benefits of replacing these remaining aged diesel commercial vehicles to roadside air quality, the feedback of the transport trades and the time for the replacement of these vehicles, we have thus decided to extend the application period of pre-Euro diesel commercial vehicles by 18 months, i.e. deferring the deadline from 30 September 2008 to 31 March 2010 to dovetail with the deadline for Euro I diesel commercial vehicles.

OTHER OPTIONS

10. We have given careful considerations to other options to further accelerate the replacement of aged diesel commercial vehicles including extending the grant to diesel commercial vehicle owners who have scrapped their vehicles without replacement and mandating the retirement of old vehicles. Our assessment is set out in ensuing paragraphs.

Providing One-Off Grant to Owners who Scrapped their Vehicles without Replacement

11. This suggestion has been made with reference to various government ex gratia payment schemes to compensate operators of various trades to give up their businesses for good. However, in the case of the one-off grant scheme, the main objective is not to encourage the transport trades to give up their businesses but to facilitate them to carry on their businesses with less polluting new vehicles. If they have

decided to fold their businesses, it will be unjustifiable for the Government to provide them with compensation by way of this one-off grant.

Mandating the Retirement of Old Commercial Vehicles

12. Mandating the retirement of old commercial vehicles have grave implications for the transport trades. Vehicle owners who cannot afford to replace the old commercial vehicles will be forced out of business. As far as we know, only Singapore and the Mainland have put in place such arrangements. Singapore requires buses and goods vehicles to retire at 17 and 20 years old respectively. The Mainland requires coaches and goods vehicles to retire at 10 years old but extension of vehicle service life is allowed. The European Union, USA, UK and Japan do not have such a requirement. Given the drastic implications to the transport trades, we do not recommend this option.

Raising Vehicle Licence Fees of Old Commercial Vehicles

13. Vehicle engine components are subject to wear and tear during operation. For this reason, older vehicles in general tend to have more breakdowns and higher tailpipe emissions. This is particularly so for those vehicles which are not properly serviced and maintained. Replacing old vehicles by new ones that are equipped with the same or even more advanced emission control devices can benefit roadside air quality. The rising concern over the state of our air quality has also prompted certain quarters in the community to urge the Government to adopt robust measures to deter the continuing use of aged vehicles. The slow response to the one-off grant scheme has further reinforced their argument that sole reliance on incentive schemes may not achieve the desired results of phasing out vehicles with high emissions. Raising the vehicle licence fees of old vehicles has been cited as a possible option. Increasing the licence fee of old vehicles can be a way to internalize the external costs (i.e. the social and health hazards) arising from the

operation of these vehicles, which is in line with the Polluter Pay Principle.

14. We accept that the best way to encourage owners of aged commercial diesel vehicles to accelerate replacement of their vehicles is through a combination of "carrots and sticks". In addition to extending the application period for the one-off grant, we intend to look into the option of raising the vehicle licence fees of old vehicles to provide an added impetus to vehicle owners to replace their old vehicles with cleaner ones. We will fully consult the transport trade and the Legislative Council's Panel on Environmental Affairs before taking forward the proposal.

WAY FORWARD

15. Members are invited to note the extension of the application period for pre-Euro diesel commercial vehicles under the one-off grant scheme to 31 March 2010 and our intention to consider the option of increasing the vehicle licence fees of age commercial vehicles in order to accelerate the replacement of our aged commercial vehicle fleet.

Environmental Protection Department 25 September 2008

First Registration Year	Age	Total Number of Vehicles	Proportion (%) (Cumulative % in
		or vemeres	bracket)
1988 and before	20 and above	1 721	1 (1%)
1989	19	1 262	1 (2%)
1990	18	1 997	1 (3%)
1991	17	3 250	2 (6%)
1992	16	6 679	5 (10%)
1993	15	7 112	5 (15%)
1994	14	6 614	5 (20%)
1995	13	5 686	4 (24%)
1996	12	6 315	4 (28%)
1997	11	9 081	6 (35%)
1998	10	6 899	5 (40%)
1999	9	6 502	5 (44%)
2000	8	10 817	8 (52%)
2001	7	15 887	11 (63%)
2002	6	8 769	6 (69%)
2003	5	6 977	5 (74%)
2004	4	7 913	6 (79%)
2005	3	8 667	6 (85%)
2006	2	7 716	5 (91%)
2007	1	7 804	5 (96%)
2008	0	5 396	4 (100%)
Total		143 064	

Vehicle Age Profile of Commercial Vehicles of All Fuel Types (as at 21 July 2008)

Notes:

- The commercial vehicles in the above table include taxis, light/medium/heavy/goods vehicles, private light buses, private/public non-franchised buses and special purpose vehicles of all fuel types.
- Pre-Euro diesel commercial vehicles were first registered before 1 April 1995.
- Euro I diesel commercial vehicles were first registered between 1 April 1995 and 31 March 1997 for buses and goods vehicles over 4 tonnes, and between 1 April 1995 and 30 September 1998 for other diesel commercial vehicles.