

**For discussion on
2 October 2013**

**LEGISLATIVE COUNCIL
PANEL ON ENVIRONMENTAL AFFAIRS**

**Mandatory Retirement of
Pre-Euro IV Diesel Commercial Vehicles**

PURPOSE

This paper seeks Members' support for a revised proposal to phase out pre-Euro IV diesel commercial vehicles through an incentive-cum-regulatory approach and to limit the service life of newly registered diesel commercial vehicles at 15 years.

BACKGROUND

2. To improve roadside air quality and better protect public health, the Chief Executive proposed in the 2013 Policy Address to phase out some 80,000 pre-Euro IV diesel commercial vehicles through an incentive-cum-regulatory approach and to limit the service life of newly registered diesel commercial vehicles at 15 years. These diesel commercial vehicles include goods vehicles, light buses and non-franchised buses. The implementation of the proposal can help reduce emissions of respirable suspended particulates (RSP) and nitrogen oxides (NOx) from vehicles by 80% and 30% respectively. Apart from contributing to the attainment of the new Air Quality Objectives (AQOs) which will take effect in 2014, the proposal can also reduce the cancer risk due to exposure to diesel engine exhaust which has been classified as carcinogenic by the World Health Organization. A comparison of the emission performance of pre-Euro to Euro V diesel commercial vehicles is at **Annex A**. As at end March 2013, there were some 131,200 registered diesel

commercial vehicles in Hong Kong, of which some 84,600 were pre-Euro IV vehicles. A profile of these vehicles is at **Annex B**.

3. We consulted this Panel on 15 May 2013. The Panel met with the deputations from the transport trades and other stakeholders on 25 May 2013 on the proposal. The transport trades have suggested that the ex-gratia payment levels to be raised, the payment level to be uncoupled from whether vehicle owners procure new replacement vehicles, and the phasing out timetable be extended. Goods vehicle body builders suggested allowing at least two years for phasing out pre-Euro II, Euro II and Euro III goods vehicles respectively. The green groups would like to see the early implementation of the proposal and the prudent use of public money. Having regard to all the views collected, the objective of reducing air pollution caused by pre-Euro IV diesel commercial vehicles as soon as practicable, the principles of prudent fiscal management and the polluter pays, we propose enhancing the ex-gratia payment and deferring the retirement deadlines for Euro I, II and III diesel commercial vehicles, while keeping the proposed service life of newly registered diesel commercial vehicles at 15 years unchanged.

THE REVISED PROPOSAL

Ex-gratia Payment

4. We propose enhancing the ex-gratia payment package by raising the payment levels, providing only one tier of ex-gratia payment and reducing the number of age bands from five to three. The original and revised proposals of ex-gratia payment as well as our considerations are as follows:

		Age of Scrapped vehicles and Ex-gratia Payment Level (Based on average taxable values of new vehicles)				
		18 years or above	16 years - below 18 years	13 years - below 16 years	10 years - below 13 years	Below 10 years
Original Proposal	Without replacing with new vehicles	10%	12%	14%	16%	18%
	With new replacement vehicles of the same class	18%	21%	24%	27%	30%
Revised Proposal	<i>Regardless of whether vehicle owners replace their vehicles with new ones</i>	16 years and above 27%		13 years – below 16 years 30%	Below 13 years 33%	

5. The revised proposal has addressed the key concerns of the transport trades as follows –

- (a) providing only one tier of ex-gratia payment (i.e. the ex-gratia payment level will only be linked with the age of the phased-out vehicles irrespective of whether a new replacement vehicle will be acquired) would give greater flexibility for vehicle owners to choose whether and when to buy a replacement vehicle, thereby alleviating the worries of the transport trades that vehicle suppliers might profiteer through raising vehicle prices as the owners seek to procure new vehicles by certain deadlines. The revised approach will also reduce the pressure on the vehicle body building trade due to bunching effect; and
- (b) merging the two oldest original age bands, coupled with the proposed increase of ex-gratia payment levels ranging from

previously 10% to 30% to 27% to 33% of average taxable values of new vehicles, would provide owners of diesel commercial vehicles, in particular the pre-Euro and Euro I ones, with higher payment, thus alleviating their financial hardship that the transport trades are most concerned about.

The average vehicle taxable values for all the vehicle classes concerned in the 2012-13 financial year are set out at **Annex C**. The revised ex-gratia payment package would amount to around \$11.71 billion, representing an increase of around \$3 billion from the estimated funding of \$8.7 billion required under the original offer made in January 2013.

Retirement Deadlines

6. We propose that the retirement deadlines for Euro I, Euro II and Euro III diesel commercial vehicles be deferred by one year respectively to address the concern of the transport trades. The original and revised phasing-out timetables are set out below.

	Pre-Euro	Euro I	Euro II	Euro III
Original Proposal	1 January 2016		1 January 2017	1 January 2019
Revised Proposal	1 January 2016	1 January 2017	1 January 2018	1 January 2020

7. The revised retirement deadlines will provide more time for the vehicle scrapping trade and the vehicle body building trade to tackle the surge of demand to be brought about by the phasing-out programme. Meanwhile, for the most polluting pre-Euro diesel commercial vehicles, the proposed retirement deadline will remain unchanged, i.e. 1 January 2016.

8. Further extension of the proposed retirement deadlines would

compromise the attainment of the new AQOs by 2020 and the compliance of the 2015 and 2020 emission reduction targets set by the HKSAR Government.

Service Life Limit for New Diesel Commercial Vehicles

9. We propose keeping the proposed age limit of 15 years unchanged because it can help ensure timely replacement of diesel commercial vehicles in the long run for better roadside air quality. The transport trades also find this generally acceptable.

IMPLEMENTATION

10. Subject to the support of the Panel to the revised proposal, the Secretary for the Environment will make a new regulation under the Air Pollution Control Ordinance (Cap. 311) (APCO) to require registered pre-Euro IV diesel commercial vehicles to, upon each application for licence from the specified deadlines, meet the prevailing emission design standards applicable for a diesel commercial vehicle of the same class and design weight seeking first registration at the time the licence is being applied for. Failure to comply with the requirement may be a ground for the Commissioner for Transport (C for T) to refuse to license the vehicles under the Road Traffic Ordinance (Cap. 374).

11. In line with the previous two incentive schemes for replacement of pre-Euro III diesel commercial vehicles and the mandatory installation of emission reduction devices in pre-Euro diesel vehicles, we propose to use first registration dates for distinguishing pre-Euro IV vehicles of different emission standards in the proposed regulation. As first registration dates are stated in vehicle registration documents, it will be easy and clear for pre-Euro IV vehicle owners to understand the phasing-out deadlines applicable

to their vehicles. The dates on which different Euro emission standards were adopted for vehicles at their first registration are tabulated at **Annex D**.

12. To effect the proposed 15-year service life limit, the proposed regulation shall provide that a diesel commercial vehicle first registered after its commencement shall, upon each application for licence as from its 15th anniversary date of first registration, meet the prevailing emission design standards applicable for a diesel commercial vehicle of the same class and design weight seeking first registration at the time the licence is being applied for. Failure to meet the requirement may be a ground for C for T to refuse to license the vehicles.

13. To prevent abuse of the ex-gratia payment scheme, the retired diesel commercial vehicle must have a valid licence at the time of scrapping. The deadlines for application for the ex-gratia payment under the proposed scheme are shown at **Annex E**. They will be one day before the respective retirement deadlines.

14. To reflect the latest vehicle prices as far as practicable, we will review the amount of ex-gratia payment in the light of the average taxable values of vehicles first registered over the latest twelve-month period available before making our submission to the Finance Committee and hence the estimated funding required for the scheme may be subject to further refinements. The ex-gratia payment amount will remain the same thereafter throughout the proposed scheme.

15. Subject to the support of this Panel, we will table the proposed regulation to the LegCo in late October / early November 2013 for negative vetting. Upon approval of the regulation on completion of the vetting procedures, we will seek the Finance Committee's approval of the funding required as soon as possible with

a view to implementing the scheme in the first quarter of 2014.

16. The scheme will not be applicable to franchised buses because there is a separate programme to tackle the emission problem arising from pre-Euro IV franchised buses. Under the established bus replacement programme, franchised buses will have to be replaced before reaching 18 years old. As a result, all pre-Euro buses have already been phased out and all Euro I buses will be phased out by 2015. As for Euro II and III buses, the Government will fully fund the capital costs of retrofitting selective catalytic reduction devices for some 1,400 Euro II and III franchised buses so as to upgrade their emission performance comparable to that of Euro IV buses or above. The scheme will also not be applicable to some 1,600 special purpose vehicles which have not been subject to emission control in the first place due to their unique usage. Owners of Euro II diesel commercial vehicles who have been allowed to retain their eligibility for the grant under the special arrangement in the previous voluntary incentive scheme will not be eligible to participate the ex-gratia payment scheme with the same Euro II vehicle.

ADVICE SOUGHT

17. Members are invited to support the revised proposal as set out in paragraphs 4 to 9 above to phase out pre-Euro IV diesel commercial vehicles and to limit the service life of newly registered diesel commercial vehicles at 15 years.

Environmental Protection Department
September 2013

**Comparison of Emission Performance of Diesel Commercial
Vehicles of Different Vehicle Design Standards**

Vehicle Design Standards	Amount of Exhaust Emission Relative to Euro IV Diesel Commercial Vehicle	
	RSP	NO _x
Pre-Euro	34	2.6
Euro I	18	2.3
Euro II	7.5	2
Euro III	5	1.4
Euro IV	1	1
Euro V	1	0.6

Annex B

Profile of Registered Diesel Commercial Vehicles (as at end March 2013)

Engine Standard (Years of service)	Light Goods Vehicles		Medium Goods Vehicles (5.5<gvw<=24 T)		Heavy Goods Vehicles (gvw>24 T)		Non-franchised Bus		Public Light Bus (diesel)		Private Light Bus (diesel)		All Diesel Commercial Vehicles	
	No. of vehicles	% of total	No. of vehicles	% of total	No. of vehicles	% of total	No. of vehicles	% of total	No. of vehicles	% of total	No. of vehicles	% of total	No. of vehicles	% of total
Pre-Euro (18+ years)	10,394	7.9%	7,515	5.7%	674	0.5%	192	0.1%	15	0.0%	322	0.2%	19,112	14.6%
Euro 1 (15-18 years)	9,573	7.3%	2,502	1.9%	315	0.2%	135	0.1%	306	0.2%	365	0.3%	13,196	10.1%
Euro 2 (12-15 years)	12,377	9.4%	6,373	4.9%	824	0.6%	822	0.6%	535	0.4%	392	0.3%	21,323	16.3%
Euro 3 (7-12 years)	17,581	13.4%	9,666	7.4%	515	0.4%	2,662	2.0%	389	0.3%	157	0.1%	30,970	23.6%
Euro 4 or above (0-7 years)	25,856	19.7%	13,780	10.5%	2,271	1.7%	3,805	2.9%	225	0.2%	669	0.5%	46,606	35.5%
Total	75,781	57.8%	39,836	30.4%	4,599	3.5%	7,616	5.8%	1,470	1.1%	1,905	1.5%	131,207	100%

Annex C

Average Vehicle Taxable Values for 2012-13 Financial Year

Vehicle Classes	Average Taxable Value (HK\$)	No. of Pre-Euro IV Vehicles as of 31 Mar 2013
Light Goods Vehicles (weight not exceeding 1.9t)	213,000 ¹	389
Light Goods Vehicles (van-type)(weight more than 1.9t, but not exceeding 5.5t)	260,880	28,279
Light Goods Vehicles(non van-type)(weight more than 1.9t, but not exceeding 5.5t)	332,871	21,257
Medium Goods Vehicles (5.5t < weight ≤ 10t)	418,035	3,567
Medium Goods Vehicles (10t < weight ≤ 13t)	550,361	2,300
Medium Goods Vehicles (13t < weight ≤ 16t)	691,998	14,319
Medium Goods Vehicles (16t < weight ≤ 24t)	832,433	5,870
Heavy Goods Vehicles(weight more than 24t)	901,782	2,328
Non-franchised Buses (17-30 seats)	646,863	1,795
Non-franchised Buses (≥ 31 seats)	1,139,649	2,016
Light Buses	532,959	2,481

¹ As no vehicle of this weight class was registered in the 2012-13 financial year, the average vehicle taxable value is based on the vehicles of similar weight that were registered in the 2012-13 financial year.

Annex D

First Registration Dates for Different Euro Emission Standards

Diesel Commercial Vehicles	Permitted Gross Vehicle Weight	Dates When The Euro Emission Standards Were Applicable to Vehicles Seeking First Registration			
		pre-Euro	Euro I	Euro II	Euro III
Goods Vehicles	Not more than 1.7 tonnes	Before 1 April 1995	1 April 1995 to 30 September 1998	1 October 1998 to 31 December 2000	1 January 2001 to 31 December 2005
	More than 1.7 but not more than 2.5 tonnes		1 April 1995 to 30 June 1999	1 July 1999 to 31 December 2001	1 January 2002 to 31 December 2006
	More than 2.5 but not more than 3.5 tonnes		1 April 1995 to 30 September 1998	1 October 1998 to 30 September 2001	1 October 2001 to 30 September 2006
	More than 3.5 but not more than 4 tonnes		1 April 1995 to 31 Mar 1997	1 April 1997 to 30 September 2001	
	More than 4 tonnes				
Light Buses	Not more than 1.7 tonnes	Before 1 April 1995	1 April 1995 to 30 September 1998	1 October 1998 to 31 December 2000	1 January 2001 to 31 December 2005
	More than 1.7 but not more than 2.5 tonnes		1 April 1995 to 30 June 1999	1 July 1999 to 31 December 2001	1 January 2002 to 31 December 2006
	More than 2.5 but not more than 3.5 tonnes		1 April 1995 to 30 September 1998	1 October 1998 to 31 July 2003	1 August 2003 to 30 September 2006
	More than 3.5 but not more than 4 tonnes		1 April 1995 to 31 March 1997	1 April 1997 to 30 September 2001	1 October 2001 to 30 September 2006
	More than 4 tonnes				
Non-franchised Buses	More than 3.5 but not more than 4 tonnes	Before 1 April 1995	1 April 1995 to 30 September 1998	1 October 1998 to 30 September 2001	1 October 2001 to 30 September 2006
	More than 4 tonnes		1 April 1995 to 31 March 1997	1 April 1997 to 30 September 2001	

Annex E

Application Deadlines for Ex-gratia Payment

	Pre-Euro	Euro I	Euro II	Euro III
Retirement Deadline	1 January 2016	1 January 2017	1 January 2018	1 January 2020
Application Deadline for Ex-gratia Payment Scheme	31 December 2015	31 December 2016	31 December 2017	31 December 2019