

## **ITEM FOR FINANCE COMMITTEE**

### **HEAD 44 – ENVIRONMENTAL PROTECTION DEPARTMENT**

#### **Subhead 700 General non-recurrent**

#### **New Item “Ex-gratia payment for phasing out pre-Euro IV diesel commercial vehicles”**

Members are invited to approve the creation of a new commitment of \$11,444 million for providing ex-gratia payment to registered owners of some 82 000 pre-Euro IV diesel commercial vehicles to phase out their vehicles.

### **PROBLEM**

Diesel commercial vehicles are the dominant source of air pollution at street level in Hong Kong. To improve roadside air quality and better protect public health, we need to adopt an incentive-cum-regulatory approach to phase out some 82 000 pre-Euro IV diesel commercial vehicles.

### **PROPOSAL**

2. The Director of Environmental Protection, with the support of the Secretary for the Environment, proposes to create a new commitment of \$11,444 million for providing an ex-gratia payment to registered owners of pre-Euro IV diesel commercial vehicles for phasing out these vehicles. For the purpose of the ex-gratia payment scheme, “commercial vehicles” include goods vehicles, light buses and non-franchised buses. Subject to the funding approval by the Finance Committee, we plan to launch the scheme on 1 March 2014.

**/JUSTIFICATION .....**

**JUSTIFICATION**

3. Pre-Euro IV diesel commercial vehicles are the major emitters of respirable suspended particulates (RSP) and nitrogen oxides (NOx) which contribute to roadside air pollution in Hong Kong. In 2011, these vehicles accounted for 86% of RSP and 43% of NOx emissions of the whole vehicular fleet. As at end November 2013, there were some 134 000 registered diesel commercial vehicles in Hong Kong, of which some 82 000 were pre-Euro IV vehicles. A profile of the registered diesel commercial vehicles is at Enclosure 1 and a comparison of the emission performance of pre-Euro to Euro V diesel commercial vehicles is at Enclosure 2.

Encl. 1

Encl. 2

4. To expedite the phasing out of heavily-polluting diesel commercial vehicles, the Environmental Protection Department (EPD) completed two voluntary vehicle replacement incentive schemes, one in 2010 for pre-Euro and Euro I diesel commercial vehicles and the other in 2013 for Euro II ones. The take-up rates of the two voluntary incentive schemes were about 30% and 25% respectively. The lukewarm response indicated that more resolute actions are needed to phase out heavily-polluting diesel commercial vehicles.

5. In June 2012, the International Agency for Research on Cancer of the World Health Organisation classified diesel engine exhaust as carcinogenic to humans. To improve roadside air quality and better protect public health, the Chief Executive proposed in the 2013 Policy Address to set aside \$10 billion as subsidies to owners of over 80 000 pre-Euro IV diesel commercial vehicles in order to progressively phase out these vehicles and to limit the service life of newly registered diesel commercial vehicles at 15 years.

***Proposed Ex-gratia Payment Scheme***

6. After consulting the transport trades, other relevant stakeholders and the Legislative Council Panel on Environmental Affairs (Panel), we propose to phase out pre-Euro IV diesel commercial vehicles through an incentive-cum-regulatory approach. Under this approach, we will –

- (a) offer an ex-gratia payment ranging from 27% to 33% of the average taxable values of new vehicles to eligible vehicle owners for phasing out their pre-Euro IV diesel commercial vehicles;

/(b) .....

- (b) phase out pre-Euro IV diesel commercial vehicles with reference to their respective dates of first registration. The retirement deadline for the most polluting pre-Euro diesel commercial vehicles is 1 January 2016, while that for Euro I is 1 January 2017, Euro II is 1 January 2018 and Euro III is 1 January 2020; and
- (c) set a service life limit of 15 years for newly registered diesel commercial vehicles to ensure timely replacement of vehicles in the long run.

7. The Air Pollution Control (Air Pollutant Emission) (Controlled Vehicles) Regulation (the Regulation) for effecting the above retirement deadlines and service life limit<sup>1</sup> has been enacted for commencement on 1 February 2014.

8. We propose to peg the ex-gratia payment levels of various vehicle classes to the average taxable values of vehicles of the same class first registered between 1 December 2012 and 30 November 2013 in accordance with the following schedule –

<b>Age of scrapped diesel commercial vehicle</b> (counting from its first registration date to the cancellation of its vehicle registration)			
	<b>16 years or above</b>	<b>13 years to below 16 years</b>	<b>Below 13 years</b>
<b>Ex-gratia payment level</b> (based on average taxable values of new vehicles)	27%	30%	33%

/9. ....

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<sup>1</sup> The Regulation requires the concerned vehicles to, on each licence application from the specified deadlines or from its 15<sup>th</sup> anniversary date of first registration, as the case may be, comply with the emission standards applicable to them as if they were first registered on the date of the vehicle licence application. Failure to comply with the requirement may be a ground for the Commissioner for Transport to refuse to license the vehicles under section 25(1)(ic) of the Road Transport Ordinance (Cap. 374). These vehicles would thus be phased out unless their vehicle owners could prove that their vehicles could meet the said standards, which might be possible in the future as technology advances.

Encl. 3

9. The ex-gratia payment levels inversely correlate with the age of the vehicles to be phased out and will remain the same thereafter throughout the proposed scheme. Vehicle owners who choose to scrap their vehicles ahead of the mandatory retirement deadlines may receive a higher ex-gratia payment, having regard to the age of their vehicles. This will give extra impetus for vehicle owners to take action earlier. The ex-gratia payment levels of various classes of diesel commercial vehicles are set out at Enclosure 3. The proposed classification of vehicles is basically the same as the ones used in the previous two voluntary vehicle replacement incentive schemes, except that a new class is created for double-deck non-franchised buses as their average taxable value is significantly higher than those of single-deck ones.

### *Implementation of the Proposed Scheme*

10. The Transport Department (TD) will be responsible for administering the proposed scheme, including receiving applications, vetting eligibility, approving applications and arranging payment to the eligible vehicle owners for approved applications.

11. In line with the previous two voluntary vehicle replacement incentive schemes, we will –

Encl. 4

- (a) use, for clarity to vehicle owners, vehicle first registration dates for delineating vehicles of different emission design standards. This approach is also adopted in the Regulation for implementing the retirement deadlines. The dates on which different Euro emission standards were adopted for vehicles at their first registration are tabulated at Enclosure 4; and
- (b) require the diesel commercial vehicle to be scrapped under the scheme to have a valid licence at the time when the vehicle registration is cancelled and its registered vehicle owner to notify the Commissioner for Transport (C for T) of the cancellation of the vehicle registration. Only vehicles that are scrapped after the launch of the scheme and are on or before the respective dates below are eligible to apply for the ex-gratia payment. For vehicles that have their registration cancelled on the ground of scrapping under the scheme, C for T will not allow re-registration and hence the vehicles can no longer be used on the road.

**/Pre-Euro .....**

	<b>Pre-Euro</b>	<b>Euro I</b>	<b>Euro II</b>	<b>Euro III</b>
Respective deadlines for applying for the ex-gratia payment	31 December 2015	31 December 2016	31 December 2017	31 December 2019

12. To prevent abuse of the ex-gratia payment scheme, we will put in place the following additional safeguards –

(a) Eligibility for Application

As the policy intent is to phase out pre-Euro IV diesel commercial vehicles that are still running on the road in Hong Kong, we propose that only diesel commercial vehicles that are registered as of 10 January 2014 are eligible for the ex-gratia payment<sup>2</sup>.

Owners of Euro II diesel commercial vehicles who have been allowed to retain their eligibility for applying for the grant under the special arrangement of the previous voluntary incentive scheme for replacing Euro II vehicles<sup>3</sup> will not be eligible to participate in the scheme with the same Euro II vehicle. These owners had agreed to this requirement when accepting the special arrangement in mid-2013.

(b) Register for Vehicle Scrapping Companies

To strengthen the governance of the scheme and facilitate application for the ex-gratia payment by vehicle owners, EPD will set up a register of vehicle scrapping companies for the scheme. Only the scrapping certificates issued by the vehicle scrapping companies registered with EPD will be accepted for application of the ex-gratia payment. Registered vehicle scrapping companies are required to keep complete records on vehicles scrapped under the scheme and these records are subject to random checking and inspection by TD.

/Besides .....

<sup>2</sup> Diesel commercial vehicles which have applied for re-registration as of 10 January 2014 are also eligible for the ex-gratia payment.

<sup>3</sup> The three-year voluntary incentive scheme for replacing Euro II diesel commercial vehicles expired on 30 June 2013. In order to accommodate last-minute purchases of replacement vehicles prior to the deadline, a special arrangement was introduced for owners who had placed an order for a new vehicle by 30 June 2013 to apply for retaining their eligibility for the one-off grant under the voluntary incentive scheme. Vehicle owners who have been allowed to retain their eligibility must lodge their application for the grant not later than 30 June 2014.

Besides, when vetting the application for registration by the vehicle scrapping companies, EPD will conduct site inspection to verify the locations of their scrapping yards. The concerned vehicle scrapping companies are required to apply for re-registration every year. After the termination of their businesses, these companies are required to report to EPD within two weeks and submit the complete records on vehicles scrapped under the scheme.

### *Expected benefits*

13. Phasing out some 82 000 pre-Euro IV diesel commercial vehicles can help reduce vehicular emissions of RSP and NO<sub>x</sub> by 80% and 30% respectively. It will lead to a reduction in the estimated number of premature deaths due to long-term exposure to these pollutants. Apart from contributing to the attainment of the 2015 and 2020 emission reduction targets set by the Government as well as the new Air Quality Objectives which took effect on 1 January 2014, the proposal can also reduce by half the cancer risk due to exposure to diesel engine exhaust. The service life limit of 15 years for newly registered diesel commercial vehicles can help timely replacement of these vehicles in the long run for better roadside air quality.

## **FINANCIAL IMPLICATIONS**

### *Non-recurrent Expenditure*

14. We propose to create a new commitment of \$11,444 million for the proposed ex-gratia payment scheme for phasing out pre-Euro IV diesel commercial vehicles. Detailed calculations are set out at Enclosure 3. The estimated cash flow for planning and budgetary purpose is as follows –

<b>Financial year</b>	<b>(\$ million)</b>
2013-14	280
2014-15	3,360
2015-16	3,039
2016-17	1,944
2017-18	1,370
2018-19	829
2019-20	622
<b>Total</b>	<b>11,444</b>

15. The proposed commitment is higher than the amount set aside for the initiative in the 2013 Policy Address. This is mainly due to an enhancement of 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. We consider it appropriate to enhance the package after taking into account the views of the transport trades, other relevant stakeholders and the Panel; the objective of reducing air pollution caused by pre-Euro IV diesel commercial vehicles as soon as practicable; and the principles of prudent fiscal management and the polluter pays.

### *Recurrent Expenditure*

16. Both EPD and TD would require additional staffing resources for implementing the proposed scheme. Subject to the Finance Committee's approval of the above proposal, the manpower resources deployed for the scheme will be reflected in the Estimates of the relevant years.

## **PUBLIC CONSULTATION**

17. We consulted the Advisory Council on the Environment and the Transport Advisory Committee in March 2013. They both supported the proposal to phase out pre-Euro IV diesel commercial vehicles through an incentive-cum-regulatory approach and to set a service life limit of 15 years for newly registered diesel commercial vehicles.

18. We have taken into account the views of the relevant trades, including transport operators, vehicle vendors, vehicle body builders and vehicle scrapping agents, on the proposal in formulating the proposed ex-gratia payment scheme. We consulted the Panel on the proposed scheme on 2 October 2013. Noting the environmental benefits of the proposal and that the ex-gratia payment scheme and the phasing out programme were generally supported by the transport trades and other relevant trades, the Panel supported our proposal including seeking funding approval from this Committee for the ex-gratia payment.

19. EPD will report the progress of the mandatory vehicle retirement scheme to the Panel on an annual basis.

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

Engine Standard (Years of service)	Light Goods Vehicles		Medium Goods Vehicles (5.5<permitted gross vehicle weight (pgvw) <=24 T)		Heavy Goods Vehicles (pgvw>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)	9 653	7.2%	7 068	5.3%	669	0.5%	179	0.1%	15	0.0%	315	0.2%	17 899	13.3%
Euro I (15-18 years)	10 540	7.8%	2 402	1.8%	313	0.2%	131	0.1%	286	0.2%	357	0.3%	14 029	10.4%
Euro II (12-15 years)	10 645	7.9%	6 074	4.5%	782	0.6%	605	0.5%	512	0.4%	401	0.3%	19 019	14.2%
Euro III (7-12 years)	17 525	13.0%	9 646	7.2%	515	0.4%	2 616	1.9%	406	0.3%	192	0.1%	30 900	23.0%
Euro IV or above (0-7 years)	29 421	21.9%	15 346	11.4%	2 578	1.9%	4 105	3.1%	235	0.2%	842	0.6%	52 527	39.1%
Total	77 784	57.9%	40 536	30.2%	4 857	3.6%	7 636	5.7%	1 454	1.1%	2 107	1.6%	134 374	100%

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**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	
	Respirable suspended particulates	Nitrogen oxides
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

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**Enclosure 3 to FCR(2013-14)52**

**Proposed Ex-gratia Payment Levels**

Column (1)		Column (2)	Column (3)			Column (4)			Column (5)
Classes of Diesel Commercial Vehicles		Average Taxable Value for New Vehicles from Dec 2012 to Nov 2013 (HK\$)	Ex-gratia Payment for Scrapped Vehicles of Different Ages* (HK\$)			No. of Vehicles of Different Ages Counting from the First Registration Dates of the Vehicles as of 30 Nov 2013			Total Ex-gratia Payment (= [Column(3)(a)× Column(4)(a)] + [Column(3)(b)× Column(4)(b)] + [Column(3)(c)× Column(4)(c)]) (HK\$)
			(a)	(b)	(c)	(a)	(b)	(c)	
			16 years or above (27% of Column 2)	13, 14 or 15 years (30% of Column 2)	below 13 years (33% of Column 2)	16 years or above	13, 14 or 15 years	below 13 years	
Light Goods Vehicles	permitted gross vehicle weight (pgvw) ≤ 1.9 tonnes	221,226	59,700	66,400	73,000	365	1	4	22,148,900
	van-type, 1.9 tonnes < pgvw ≤ 5.5 tonnes	264,143	71,300	79,200	87,200	8 872	5 699	12 844	2,203,931,200
	non van-type, 1.9 tonnes < pgvw ≤ 5.5 tonnes	337,095	91,000	101,100	111,200	9 562	3 880	7 136	2,055,933,200
Medium Goods Vehicles	5.5 tonnes < pgvw ≤ 10 tonnes	414,881	112,000	124,500	136,900	1 456	485	1 540	434,280,500
	10 tonnes < pgvw ≤ 13 tonnes	508,371	137,300	152,500	167,800	1 086	409	744	336,323,500
	13 tonnes < pgvw ≤ 16 tonnes	683,427	184,500	205,000	225,500	5 739	2 132	5 904	2,827,257,500
	16 tonnes < pgvw ≤ 24 tonnes	831,393	224,500	249,400	274,400	2 349	988	2 358	1,420,792,900
Heavy Goods Vehicles	pgvw > 24 tonnes	934,240	252,200	280,300	308,300	1 218	404	657	622,973,900
Non-franchised Buses	single-deck, 17-30 seats	659,316	178,000	197,800	217,600	94	184	1 301	336,224,800
	single-deck, ≥ 31 seats	1,091,510	294,700	327,500	360,200	154	79	1 502	612,276,700
	double-deck	2,703,266	729,900	811,000	892,100	124	93	0	165,930,600
Light Buses		543,987	146,900	163,200	179,500	840	786	858	405,682,200
<b>Total</b>								<b>11,443,755,900</b>	

\* Counting from the first registration date of the vehicle to the cancellation of its vehicle registration.

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**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
			Both dates inclusive		
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 March 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	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	

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