

立法會
Legislative Council

LC Paper No. CB(1)180/15-16(04)

Ref. : CB1/PL/EA

Panel on Environmental Affairs

Meeting on 27 November 2015

**Background brief on tightening of emission standards of
newly registered motor vehicles
prepared by the Legislative Council Secretariat**

Purpose

This paper provides background information on the tightening of the emission standards of newly registered motor vehicles. It also summarizes the views and concerns expressed by Members when related issues were discussed by the relevant committees of the Legislative Council in the 2011-2012 to 2015-2016 legislative sessions.

Background

Emission control on motor vehicles

2. Motor vehicles are the major source of roadside air pollution. To improve roadside air quality, the Administration has been tightening motor vehicle fuel and emission standards with reference to international developments and when the relevant compliant motor fuels and vehicles can be made available to Hong Kong.

3. The Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J) ("the Regulations")¹ provide, among other matters, that motor vehicles in Hong Kong must be so constructed that the emissions from them

¹ The Regulations are made by the Secretary for the Environment under section 43(1)(rg) of the Air Pollution Control Ordinance (Cap. 311).

conform to the emission standards specified in the various schedules to the Regulations.

Latest emission standards prescribed for newly registered motor vehicles/cycles/tricycles in Hong Kong

4. The Administration had adopted the Euro IV emission standards for newly registered vehicles since 1 January 2006 and Euro III emission standards for newly registered motor cycles/tricycles since 1 January 2007. In tandem with the relevant emission standards set by the European Union ("EU"), the Regulations were further amended² in 2012 to require newly registered motor vehicles, except diesel light goods vehicles with a design weight of not more than 3.5 tonnes, to comply with Euro V emission standards from 1 June 2012. Newly registered diesel light goods vehicles with a design weight of not more than 3.5 tonnes have to comply with Euro V emission standards from 31 December 2012.

Qualifying emission standards of environment-friendly heavy duty commercial vehicles for a concession in the First Registration Tax

5. As the supply of Euro VI heavy duty commercial vehicles (vehicle weight over 3.5 tonnes) is increasing, the Administration has further tightened the qualifying emission standards of environment-friendly heavy duty commercial vehicles to Euro VI starting from 1 April 2015 for a concession in the First Registration Tax³, so as to encourage vehicle buyers to choose Euro VI heavy duty commercial vehicles with lower emissions and vehicle manufacturers to introduce more Euro VI heavy duty commercial vehicle models into the Hong Kong market. The Administration considers that this can help the early introduction of Euro VI emission standards for first registration of heavy duty commercial vehicles.

Other measures to control vehicle emissions

6. In parallel with the tightening of the statutory emission standards for newly registered motor vehicles, the Administration has implemented other measures to reduce vehicle emissions and improve roadside air quality in Hong

² The Air Pollution Control (Vehicle Design Standards) (Emission) (Amendment) Regulation 2012 was published in the Gazette on 23 March 2012 and tabled before the Legislative Council on 28 March 2012 for negative vetting. The relevant amendments had taken effect since 1 June 2012.

³ Since 2008, the Administration has operated the tax incentive scheme to incentivize vehicle owners to choose environment-friendly commercial vehicles. The Administration reviews the qualifying standards of environment-friendly commercial vehicle models annually in the light of technological advancement and the prevailing statutory emission standards such that the tax incentive is available only to vehicle with outstanding emission performance.

Kong in recent years. The major measures include –

- (a) implementation of a one-off subsidy scheme from August 2013 to April 2014 to replace the worn-out catalytic converters and oxygen sensors of petrol and liquefied petroleum gas ("LPG") taxis and light buses⁴;
- (b) launching of an ex-gratia payment scheme in March 2014 for phasing out Pre-Euro IV diesel commercial vehicles ("DCVs")⁵; and
- (c) introduction of roadside remote sensing equipment since 1 September 2014 to strengthen the emission control of petrol and LPG vehicles⁶.

Major views and concerns expressed by Members

7. The Panel on Environmental Affairs ("the Panel") discussed on 21 December 2011 the proposal to tighten the statutory emission standards for newly registered motor vehicles to Euro V level. Related issues were brought up at the Panel meetings on 23 March and 21 July 2015 when the Administration briefed the Panel on Budget-related initiatives relating to roadside air quality improvement measures and progress of the Pilot Green Transport Fund respectively, and during examination of Estimates of Expenditure 2012-2013, 2013-2014, 2014-2015 and 2015-2016. The major views and concerns raised by Members during these discussions are summarized in the ensuing paragraphs.

Transitional period for tightening of statutory emission standards

8. When the proposal to tighten the statutory emission standards for newly registered motor vehicles to Euro V level was discussed, some Members suggested

⁴ About 17 000 or about 80% of eligible taxis and light buses participated in the scheme. The amount of subsidy was about \$80 million.

⁵ The scheme aims to progressively phase out some 82 000 pre-Euro IV DCVs including goods vehicles, light buses and non-franchised buses by the end of 2019 while limiting the service life of newly registered DCVs to 15 years. Up to 30 September 2015, about 33 900 pre-Euro IV DCVs (i.e. about 41% of the eligible vehicles) have been retired under the scheme.

⁶ For vehicles screened as emitting excessive emissions, the Environmental Protection Department will issue Emission Testing Notices to the owners concerned requiring them to pass an emission test done with the aid of a chassis dynamometer at a designated vehicle emission test centre within 12 working days for ascertaining the rectification of the excessive emission problem. Failure to comply with the requirement will lead to cancellation of vehicle licence.

allowing a six-month transitional period for parallel importers to clear their stocks and to deliver orders which had been placed before the tightening measure. The Administration advised that it would consider specific stock-clearing proposals from relevant associations such as the Right Hand Drive Motor Association (Hong Kong) Limited as appropriate taking into account the market supply of second-hand private cars which were compliant with the new statutory emission standards.

Providing assistance to the transport trades

9. Some Members raised concerns about the impact of phasing out existing pre-Euro IV DCVs on the transport trades while raising the statutory emission standards for newly registered motor vehicles. In particular, the limited supply and high selling prices and maintenance costs of some types of post-Euro IV DCVs might cause a huge financial burden on transport operators. Members called upon the Government to ensure adequate supply of second-hand Euro IV or Euro V DCVs to meet the demand arising from the phasing-out programme.

10. The Administration assured Members that it would closely monitor the market situation and address the difficulties of the transport trades in phasing out their pre-Euro IV DCVs. The Administration also took note of the suggestion raised by a member to compile information on the costs of electric, hybrid and motor vehicles of the latest statutory emission standard for the reference of vehicle buyers.

Promotion of environment-friendly vehicles

11. Members stressed that to complement the measure of tightening the emission standards for motor vehicles, the Administration should enhance the standard of maintenance and repair services for environment-friendly vehicles through provision of proper training, and expedite the provision of supporting infrastructures including charging facilities in car parks for electric vehicles ("EVs").

12. The Administration advised that it had been encouraging the vehicle industry to make available maintenance and repair information on their vehicles, including environment-friendly vehicles. The Vocational Training Council and the Employees Retraining Board organized training courses on motor vehicle repair to help the trade keep abreast of the latest vehicle repair technologies. As regards the development of supporting infrastructures for EVs, the Administration highlighted that in July 2014, a total of 100 new medium chargers for EVs had

been installed in 16 government car parks, which had been equipped with standard chargers, for public use. In parallel, the Administration was working with the private sector to expand the EV charging infrastructure in Hong Kong.

Vehicle emission tests

13. Noting that a German vehicle manufacturer was found to have installed illegal software in its diesel private cars to cheat on vehicle emission tests, Members enquired about the Administration's follow-up actions arising from the incident and whether it would review the system for regulating vehicle emissions.

14. The Administration advised that the affected diesel private car models had not been registered for use in Hong Kong. The Environmental and Protection Department ("EPD") had met with the vehicle manufacturer concerned and other vehicle manufacturers, and requested them to confirm whether similar defeat device had been installed in their diesel private cars sold in Hong Kong. The Administration would continue to monitor the development of the case.

15. The Administration further advised that EU had planned to introduce on-road emission tests when implementing Euro VI emission standards to ensure consistency of emissions from vehicles when running on roads and tested in laboratories. EU had started implementing on-road emission tests for heavy duty vehicles (design weight above 3.5 tonnes) and would announce the relevant requirements for light duty vehicles at a later stage. EPD would monitor the development and study the feasibility of introducing these new testing requirements in Hong Kong.

Council questions

16. At the Council meetings on 4 December 2013, 25 March and 14 October 2015, Dr Hon LAM tai-fai, Hon CHAN Hak-kan, Hon Frankie YICK and Hon Frederick FUNG raised questions respectively relating to reduction of vehicle emissions in Hong Kong. Issues covered in the questions include the progress of phasing out pre-Euro IV DCVs, vehicle repair services for post-Euro IV vehicles, and the incident of cheating in vehicle emissions tests. The questions and the Administration's replies are hyperlinked in the **Appendix**.

Latest development

17. At the meeting on 27 November 2015, the Administration will brief the Panel on its proposal to tighten the statutory emission standards for newly registered motor vehicles to Euro VI level in phases from September 2016, and newly registered motor cycles and tricycles to Euro IV level in phases starting from January 2017.

Relevant papers

18. A list of relevant papers is set out in the **Appendix**.

Council Business Division 1
Legislative Council Secretariat
24 November 2015

Tightening of emission standards of newly registered motor vehicles

List of relevant papers

Date of meeting	Event	Paper
21 December 2011	Meeting of the Panel on Environmental Affairs	<p>Administration's paper on tightening emission standards of newly registered motor vehicles to Euro V level (LC Paper No. CB(1)625/11-12(04))</p> <p>Background brief on tightening emission standards of newly registered vehicles to Euro V level prepared by the Legislative Council Secretariat (LC Paper No. CB(1)625/11-12(05))</p> <p>Minutes of meeting (LC Paper No. CB(1)966/11-12)</p>
5 March 2012	Special meeting of Finance Committee for examination of Estimates of Expenditure 2012-2013	Written questions raised by Members and Administration's replies (Reply serial number: ENB080 and 114)
28 March 2012	The Air Pollution Control (Vehicle Design Standards) (Emission) (Amendment) Regulation 2012 tabled before the Legislative Council	<p>The Regulation</p> <p>Legislative Council Brief (EP150/L1/2)</p> <p>Legal Service Division report (LC Paper No. LS51/11-12)</p>

Date of meeting	Event	Paper
9 April 2013	Special meeting of Finance Committee for examination of Estimates of Expenditure 2013-2014	Written questions raised by Members and Administration's replies (Reply serial number: ENB067, 101, 166, 178, 243 and 273)
1 April 2014	Special meeting of Finance Committee for examination of Estimates of Expenditure 2014-2015	Written questions raised by Members and Administration's replies (Reply serial number: ENB107, 203, 259, 260 and 261)
23 March 2015	Meeting of the Panel on Environmental Affairs	Administration's paper on "2015-16 Budget-related initiatives of Environmental Protection" (LC Paper No. CB(1)652/14-15(03)) Minutes of meeting (LC Paper No. CB(1)847/14-15)
30 March 2015	Special meeting of the Finance Committee for examination of Estimates of Expenditure 2015-2016	Written questions raised by Members and Administration's replies (Reply serial numbers: ENB053, 074, 144, 286 and 306)
21 July 2015	Meeting of the Panel on Environmental Affairs	Administration's paper on "Progress report on the Pilot Green Transport Fund" (LC Paper No. CB(1)1113/14-15(01)) Updated background brief on "Pilot Green Transport Fund" prepared by the Legislative Council Secretariat (LC Paper No. CB(1)1113/14-15(02))

Date of meeting	Event	Paper
		Minutes of meeting (LC Paper No. CB(1)1270/14-15)
26 October 2015	Meeting of the Panel on Environmental Affairs	Administration's paper on "Progress of phasing out pre-Euro IV diesel commercial vehicles" (LC Paper No. CB(1)37/15-16(03)) Updated background brief on "Mandatory retirement of pre-Euro IV diesel commercial vehicles" prepared by the Legislative Council Secretariat (LC Paper No. CB(1)37/15-16(04))

Hyperlinks to relevant Council Questions:

Date	Council Question
4 December 2013	Press release on Council question (written) raised by Dr Hon LAM tai-fai http://www.info.gov.hk/gia/general/201312/04/P201312040328.htm
25 March 2015	Press release on Council question (written) raised by Hon CHAN Hak-kan http://www.info.gov.hk/gia/general/201503/25/P201503250439.htm
14 October 2015	Press release on Council question (written) raised by Hon Frankie YICK http://www.info.gov.hk/gia/general/201510/14/P201510140362.htm
14 October 2015	Press release on Council question (written) raised by Hon Frederick FUNG http://www.info.gov.hk/gia/general/201510/14/P201510140296.htm