

**For discussion on
21 December 2011**

**LEGISLATIVE COUNCIL
PANEL ON ENVIRONMENT AFFAIRS**

**Tightening Emission Standards of Newly
Registered Motor Vehicles to Euro V level**

PURPOSE

This paper consults Members on our proposal to tighten the statutory emission standards for newly registered vehicles to Euro V level starting from 1 June 2012 to further improve our roadside air quality.

BACKGROUND

2. Motor vehicles are the major source of roadside air pollution. To improve roadside air quality, we have been tightening motor vehicle fuel and emission standards with reference to international developments and when compliant motor fuels and vehicles can be made available to Hong Kong. With the approval of the Legislative Council, we have adopted the Euro IV emission standards for newly registered vehicles since January 2006. We also tightened the statutory standard for diesel and petrol to Euro V standards in July 2010 to further reduce vehicle emissions and pave way for the introduction of Euro V vehicles to maximize their environmental benefits.

3. On 1 October 2009, the European Union (EU) started tightening in phases its vehicle emission standards for newly registered vehicles to Euro V level. From January 2012, all newly registered vehicles in the EU will have to be Euro V vehicle models. Compared with Euro IV vehicles, Euro V heavy duty diesel vehicles emit about 40% less nitrogen oxides (NO_x) and Euro V light duty diesel vehicles about 80% less respirable suspended particulates (RSP) and 30% less NO_x. As regards Euro V petrol or LPG vehicles, they emit about 30% less NO_x than their Euro IV counterparts.

SUPPLY OF EURO V VEHICLES

4. To encourage early introduction of Euro V vehicles to Hong Kong market, Government offered tax concession for environment-friendly commercial vehicles meeting Euro V emission standards since April 2008. In response to the concession, vehicle manufacturers have advanced their supply of Euro V vehicles to the local market. By end November 2011, the number of Euro V models grew to about 480 for heavy duty vehicles, which is comparable to the total number of Euro IV heavy duty vehicle models approved by us; and 500 for light duty vehicles, which is about one-third of Euro IV light duty vehicle models approved by us. Vehicle suppliers have confirmed that by 1 June 2012, they can supply Euro V vehicles for all vehicle classes except for light goods vehicles of design weight not more than 3.5 tonnes which would only be available by 31 December 2012.

PROPOSAL

5. Given the above supply situation of Euro V vehicles, we propose to amend the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations to tighten on 1 June 2012 the statutory vehicle emission standards for all newly registered motor vehicles to Euro V level except those light goods vehicles of design weight not more than 3.5 tonnes. As for the latter, we propose to tighten the statutory vehicle emission standards on 31 December 2012. In tightening the statutory emission standards, we will also accept Japan and US standards of equivalent stringency and maintain our standing policy that newly registered diesel private cars must have similar emission performance as their petrol counterparts in respect of the emissions of nitrogen oxides and RSP, which are the key air pollutants at the roadside.

CONSULTATION

6. We have consulted vehicle suppliers including Hong Kong Motor Traders Association (MTA), which comprises local representatives of major motor vehicle manufacturers, the Right Hand Drive Motor Association (Hong Kong) Limited (RHDA), which comprises

representatives of parallel importers, and the Hong Kong Bus Suppliers Association (HKBSA), which comprises local representatives of bus manufacturers. They have no objection to the proposal as vehicle suppliers are already gearing up for the supply of Euro V vehicles to the local market.

7. While having no objection to the proposal, the RHDA has however requested Government to provide a six-month transitional period within which the imported second-hand private cars manufactured after 2005 will be exempt from the Euro V emission requirements. Its justification is that more than half of the imported second-hand private cars were manufactured between 2003 and 2008 as the prices of these vehicles were acceptable to their customers. Should Government implement Euro V emission standards, they will have to import second-hand private cars manufactured after 2006 in order to comply with the emission requirements, thereby restricting their choices of vehicles and pushing up the prices of Euro V compliant second-hand private cars due to the surge in demand. The increase in car prices would in turn make their second-hand private cars less competitive and worsen their businesses, particularly when their members are already facing a difficult time due to appreciation of the Japanese yen and economic recession. The six-month transitional arrangement could help second-hand private car importers adapt to the proposed tightening of the emission standards.

8. After careful consideration, we do not recommend acceding to the request of the RHDA on the grounds that-

- (a) in the past 12 months, among the 11,500 cars imported by individual or parallel importers, about 6,000 were already Euro V-compliant. For those second-hand private cars manufactured after 2007, the compliant rate was about 90%. Even for those manufactured in 2007 and 2006 (i.e. by next year, these cars will be five to six years old), about 80% and 70% could comply with Euro V emission standards respectively. The compliance rate is much better than that observed when we implemented the Euro IV emission standard back in 2006. At that time, only about 15% of the second-hand private cars complied with Euro IV emission standards. Given the abundant supply of compliant

second-hand private cars, tightening the statutory vehicle emission standards for all newly registered motor vehicles to Euro V level should not cause difficulties to second-hand private car importers. Indeed, as the proposed tightening of the vehicle emission standards to Euro V level would only take effect in June 2012, the second-hand private car importers should have sufficient lead time to clear up their stock and adjust their procurement and marketing strategy;

- (b) the serious level of roadside air pollution requires us to take every possible step to reduce vehicle emissions. Moreover, once these substandard cars are allowed to be brought in to local market, they will continue their operation for ten or more years until retirement; and
- (c) acceding to the request of the RHDA would be unfair to those private car suppliers who endeavour to supply Euro V private cars to the local market.

9. We have also consulted the operators of trucks, taxis, public light buses and non-franchised buses. In general, they do not object to the proposal. However, the operators of non-franchised buses and public light buses have the following suggestions-

Non-franchised Bus Operators

- (a) continue to provide tax concessions for Euro V commercial vehicles under the Environment-friendly Commercial Vehicles Scheme after the introduction of Euro V emission standards as a statutory emission requirement for newly registered vehicles;
- (b) increase the subsidy level to provide a greater incentive to encourage vehicle owners to replace their old non-franchised buses with Euro V vehicles;
- (c) make the one-off grant to encourage vehicle owners to replace their more polluting vehicles a standing arrangement to help owners to replace their aged vehicles by new ones;

- (d) require vehicle manufacturers to provide vehicle maintenance information; and

Public Light Bus Operators

- (e) encourage vehicle suppliers to provide more suitable Euro V diesel public light bus models on the local market.

10. Our responses to the above suggestions are as follows-

Non-franchised Bus Operators

- (a) the Environment-friendly Commercial Vehicles Scheme offers reduction in the first registration tax to buyers of newly registered environment-friendly commercial vehicles with truly outstanding emission performance outstripping the prevailing statutory requirements. The qualifying standard for environment-friendly commercial vehicles is now set at Euro V level. As a standing arrangement, we will review the qualifying standards annually taking account of prevailing statutory emission standards and the latest vehicle technologies. Should the prevailing qualifying standards be tightened following the review, the new qualifying standards will be introduced on 1 April each year. We will follow the same arrangement in reviewing the need to tighten the current qualifying standards after introduction of the proposed Euro V vehicle emission standards. In other words, Euro V emission standards will remain the qualifying standard until 1 April 2013;
- (b) since the introduction of the vehicle replacement incentive programme for Euro II diesel commercial vehicles in July 2010 and up to end November 2011, 483 Euro II non-franchised buses were replaced under the programme by new buses. Among them, 73 % of the replacement vehicles are Euro V models. Following increased availability of Euro V coach models on the local market, more vehicle owners have been choosing these environmentally-more-friendly coaches. To maintain the integrity of an ongoing incentive programme, we have no plan to change the grant level;

- (c) the one-off grant scheme to encourage the early replacement of the more polluting diesel commercial vehicles by new ones aims to bring early relief to roadside air pollution. Making it a standing arrangement will defeat this objective and go against the polluter-pay-principle (i.e. the vehicle owner should be responsible for the replacement of their aged vehicles). To further tackle the air pollution problems caused by aged commercial vehicles, we consider it necessary to consider introducing disincentives to discourage vehicle owners from using aged vehicles to continue their operation, instead of merely relying on the use of incentives;
- (d) vehicle suppliers are already providing vehicle maintenance information to their customers upon request. Some vehicle suppliers have also conducted seminars on the vehicle maintenance techniques to vehicle mechanics; and

Public Light Bus Operators

- (e) we have been encouraging vehicle suppliers to bring in more suitable light buses to the local market. In this connection, we have recently arranged two separate meetings for two potential diesel public light bus suppliers to brief the public light bus trade about their diesel light buses. We will continue to facilitate vehicle suppliers to discuss with the transport trades on their vehicles;

11. We have consulted the Advisory Council of Environment on 14 November 2011. Members were supportive of the proposal.

PUBLIC REACTIONS

12. We expect that the public will support the proposal which will help further reduce the emissions of motor vehicles.

ADVICE SOUGHT

13. Members are invited to advise on the proposal set out in paragraph 5 above.

**Environmental Protection Department
December 2011**