

**For discussion on
27 February 2006**

**LEGISLATIVE COUNCIL
PANEL ON ENVIRONMENTAL AFFAIRS**

**More Stringent Emission Standards for
New Heavy Duty Motor Vehicles and Motorcycles**

PURPOSE

This paper seeks Members' views on implementing, in tandem with the European Union (EU), Euro IV emission standards in Hong Kong for newly registered heavy duty vehicles and Euro III emission standards¹ for newly registered motorcycles.

BACKGROUND

2. Motor vehicles are our major source of roadside air pollution. To reduce vehicle emissions, Hong Kong has been introducing the most stringent motor vehicle fuel and emission standards as soon as they are available to the local market. In previous years, Euro II and Euro III vehicle fuel and emission standards were introduced in tandem with the EU. With the approval of the Legislative Council, we have implemented Euro IV standards for motor vehicle diesel since 1 April 2002 and for petrol since 1 January 2005. We have also introduced Euro IV emission standards for newly registered light duty vehicles not more than 3.5 tonnes from 1 January 2006.

3. The EU will tighten their emission standards for newly registered heavy duty vehicles (i.e. those over 3.5 tonnes) to Euro IV from 1 October 2006. A Euro IV model will emit about 30% and 80% less nitrogen oxides and particulates respectively than a Euro III model. The EU will also implement the Euro III emission standards for newly registered motorcycles from 1 January 2007. Compared with the existing standards, a motorcycle meeting Euro III emission standards emits about 90% and 50% less hydrocarbons and nitrogen oxides respectively than an existing model.

¹ The EU has not fixed its timetable for implementing Euro IV emission standards for motorcycles.

PROPOSAL

4. The Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311, sub. leg.) stipulates the emission standards for motor vehicles upon first registration. We propose to amend the Regulations to require –

- (a) newly registered motor vehicles each of design weight over 3.5 tonnes to comply with Euro IV emission standards from 1 October 2006; and
- (b) newly registered motorcycles to comply with Euro III emission standards from 1 January 2007.

Vehicles meeting the equivalent standards of Japan or the USA will be accepted provided that they have the same level of effectiveness in reducing emissions.

CONSULTATION

5. The proposal is not expected to have any impact on vehicle prices. We have consulted the Hong Kong Motor Traders Association (MTA), the Hong Kong Motorcycle Association and the Hong Kong Motorcycle of Commerce on the proposal. They did not raise any objection.

6. Some members of the transport trades are worried about the operability of Euro IV models in the Mainland because of the difference in standards for diesel fuel. In addition, a small number of Euro IV models may require the use of urea solution to support their selective catalytic reduction (SCR) systems for emission reduction. They are also worried about the availability of urea solution on the local market.

7. Vehicle manufacturers have advised that Euro IV vehicle models will be compatible with the Mainland diesel though their particulate emissions will be 8-10% higher than when they are powered by ultra low sulphur diesel. Operability is not a problem.

8. To support the operation of SCR-equipped vehicles, some vehicle manufacturers are already working to set up urea solution refilling facilities in Hong Kong. As for cross-boundary vehicles, their urea solution can be stored on-board because the consumption of urea solution is only 5% of that of diesel. The MTA will work together with the Government to disseminate information on urea solution refilling locations. Since there will be Euro IV models available which do not require the use of urea solution, vehicle owners can

choose vehicle models depending on their operational need.

OTHER IMPLICATIONS

9. Implementation of the proposal will not require additional staff.

IMPLEMENTATION

10. We plan to prepare the necessary legislative amendments to the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations for implementing the proposal and table them at the Legislative Council by the second quarter of 2006.

ADVICE SOUGHT

11. Members' views are sought on the implementation of the more stringent vehicle emission standards for newly registered heavy duty vehicles and motorcycles as proposed in paragraph 4.

Environment Protection Department
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