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香港工程師學會

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By post and by fax at 2869 6794

25 November 2013

Clerk to Subcommittee on Air Pollution Control  
(Air Pollutant Emission) (Controlled Vehicles) Regulation  
Legislative Council Secretariat  
Legislative Council Complex  
1 Legislative Council Road  
Central Hong Kong

[Attn: Mr Daniel SIN]

Dear Mr SIN

**Legislative Council Subcommittee on Air Pollution Control (Air Pollutant Emission) (Controlled Vehicles) Regulation –  
Views on Air Pollution Control (Air Pollutant Emission) (Controlled Vehicles) Regulation**

Thank you for inviting the Institution to put forth our views on the captioned subject.

The HKIE supports the Administration to set out the captioned Regulation for the adoption of incentive-cum-regulatory approach and the timeframe to phase out pre-Euro IV diesel commercial vehicles to address the significance of improving roadside air quality. In response to the consultation, we would like to reiterate that an effective mechanism is suggested to be established to control the redeployment of the retired/scrapped pre-Euro IV diesel commercial vehicles in other locations or regions outside Hong Kong to prevent 'export of environmental problems'.

We opine that a schedule should also be defined for conducting reviews of the relevant regulations on mandating the requirement of 15 years retirement age for diesel vehicles, with a view to align with the latest technology advancement in relation to diesel engine, exhaust treatment systems and public health.

In addition to the vehicles controlled under this Regulation, it is suggested that the Government should consider proposing similar legislation to control non-registered vehicles/engine.

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25 November 2013  
Clerk to Subcommittee on Air Pollution Control  
(Air Pollutant Emission) (Controlled Vehicles) Regulation  
[Attn: Mr Daniel SIN]

We would like to provide herewith a copy of our views and suggestions, which were previously submitted to the LegCo Panel on Environmental Affairs on Retirement of Pre-Euro IV Diesel Commercial Vehicles for the consideration of the Subcommittee.

Thank you for your attention.

Yours sincerely



Ir Raymond CHAN Kin Sek  
President  
The Hong Kong Institution of Engineers

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**Enclosure**

**Legislative Council  
Panel on Environmental Affairs**

**Views from the Hong Kong Institution of Engineers  
on Retirement of Pre-Euro IV Diesel Commercial Vehicles**

The Hong Kong Institution of Engineers (HKIE) is pleased to provide our views on the captioned subject for consideration.

2. The HKIE supports the proposal which adopts incentive-cum-regulatory approach and the timeframe suggested by Environmental Protection Department (EPD) for the retirement of pre-Euro IV Diesel Vehicles based on a few considerations as elaborated below.

3. Noting that the diesel engine exhaust is carcinogenic to humans with reference to the declaration of International Agency for Research on Cancer of World Health Organisation in July 2012, and in view of the significant improvement in air quality through the suspension of use of pre-Euro IV commercial vehicles on the public roads, the HKIE believes that retirement of pre-Euro IV Diesel Vehicles would certainly bring considerable advantages to Hong Kong from various perspectives including public health, medical expenditure, and long term social and economic benefits.

4. With the conversion of pre-Euro IV commercial vehicles to Euro IV, V or other latest models, the energy efficiency of commercial vehicles will also be increased with less energy consumption and carbon emissions, thus assisting to shape Hong Kong to be a greener metropolitan with less energy intensity.

5. In the execution of the retirement scheme, a crucial point for consideration is that the scrapped pre-Euro IV commercial vehicles must NOT be used in other locations or regions outside Hong Kong. It is because if the scrapped pre-Euro IV commercial vehicles would be used elsewhere, then Hong Kong is only exporting the environmental problems out of the territory but not solving the problems for the environment. Therefore, a proper mechanism must be established to avoid the occurrence of this potential loophole.

6. It is observed that there are special purposes vehicles still using pre-Euro IV diesel engines with limited mileages, say less than 2000km per year. We consider that compulsory replacement of these low mileage pre-Euro IV diesel commercial vehicles might not significantly affect emission reduction, while it may however contravene to the principles of 3Rs (reduce/reuse/recycle). Therefore, if circumstances allow, we would suggest the Administration to consider provision to allow low mileage pre-Euro IV diesel commercial vehicles to remain in service as long as the vehicles can pass the road worthy test and meet the limited mileage criteria before registration renewal. When appropriate, the mileage limit can be different or same for pre-Euro, Euro I, II and III vehicles.

7. We observe that advance in diesel engines in recent years have made them as environmentally friendly as petrol engines for the same mileage. Although setting a statutory retirement age of 15 years for newly registered diesel commercial vehicles at this moment seems appropriate, we suggest the government to conduct a review at a few years after the enactment of the new ordinance, so as to review the appropriate retirement age by considering the latest technological advancement in diesel engine and exhaust treatment systems. With proper maintenance for achieving good operation condition, the newer diesel vehicles may extend their service life so as to reduce wastage of serviceable vehicles. Of course the vehicles have to pass all the required road worthiness tests in order to prove that they are still fit to go on road. Also, we suggest the Administration to provide more rationale for the setting of the “15 years” standard.

8. Given the flexibility adopted to cater for the special purpose and low mileage diesel vehicles and the advanced diesel vehicles proposed above, a portion of the earmarked HK\$10 billions funding could be allocated for promoting the wider use of electric vehicles. With the rapid development of technology, commercial vehicles with electric drive train are feasible especially for the mini bus and light goods vehicle categories. The HKIE is of the view that Government should promote and subsidise wider use of electric vehicles for the non-franchised commercial operations.

9. With reference to the Administration’ paper<sup>1</sup> (“paper”) on the subject, the HKIE would like to provide further comments and suggestions as follow:

- EPD mentioned in Paragraph 3 of the paper that “...Between 2006 and 2012, the roadside nitrogen dioxide (NO<sub>2</sub>) level increased by 24%...”. The HKIE suggests that more information should be provided indicating if there was any increment in number of pre-Euro IV diesel commercial vehicles during the said period, so as to allow clearer understanding as to whether the increase of 24% of NO<sub>2</sub> was solely or mainly due to these vehicles.
- It was mentioned in Paragraph 5 of the paper that “*The lukewarm response to the two voluntary incentive schemes underlines the need for more resolute actions to phase out heavily polluting diesel commercial vehicles. In the 2013 Policy Address, the Chief Executive proposed to phase out pre-Euro IV diesel commercial vehicles with greater financial incentives...*”. The HKIE suggests the Administration to study whether there are other factors apart from the financial one for such lukewarm response in order to decide for further strategies.
- Regarding Paragraph 8(b) of the paper, we suggest the Administration to elaborate and propose more additional measures to improve roadside air quality for the public to discuss and comment.
- Regarding Paragraph 10 of the paper, which states that “... Some have suggested increasing the ex-gratia payment from 30% to 40% or even 50% for vehicles aged 10 or below...”, the HKIE would propose to have 3 levels of ex-gratia payment,

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<sup>1</sup> LC Paper No. CB(1)1003/12-13(01) – Administration’s paper on “Retirement of pre-Euro IV diesel commercial vehicles”

set according to the respective ranges of age of the vehicles (e.g. aged 2 to 5, aged 6 to 8, and aged 9-10).

- We would also like the Administration to provide further details in regard to the transitional arrangements as mentioned in Paragraph 14 of the paper.