



Mandatory Retirement of Pre-Euro IV Diesel Commercial Vehicles

Written Submission to the Legislative Council Panel on Environmental Affairs from Civic Exchange

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Mandatory retirement of pre-Euro IV diesel commercial vehicles is an effective means to reduce roadside emissions and public health risk

1. Civic Exchange supports the revised plan put forward by the Environmental Protection Department (EPD)¹ to incentivise early retirement of pre-Euro IV diesel commercial vehicles (DCV).
2. According to the 2011 Hong Kong air pollutants emission inventory published by EPD², road transport was the second largest emitter of respirable suspended particulates (RSP) and nitrogen oxides (NO_x) in Hong Kong, contributing 1,180 tonnes and 32,700 tonnes, respectively. It is also estimated that pre-Euro IV DCVs accounted for a substantial portion of these emissions, about 86 per cent of RSP and 42 per cent of NO_x.³ The proposal will significantly reduce RSP and NO_x emissions from DCVs, which in turn will reduce the annual number of premature deaths caused by long-term exposure to roadside air pollution.⁴
3. The revised plan will increase government's financial outlay to \$11.7 billion HKD, but this is a worthy investment when we consider the disproportionately large amount of roadside emissions contributed by this small portion of vehicles, as well as the medical bill and other direct and indirect economic costs stacked up as a result of poor air quality in Hong Kong.
4. In light of the costs of air pollution over the years, Civic Exchange reiterates that government's action is long overdue. We however believe that the revised plan signals the government's commitment to right the wrongs, and to implement the plans laid out in *A Clean Air Plan for Hong Kong* published in March this year.

¹ Environmental Protection Department, (2013) "Mandatory retirement of pre-Euro IV diesel commercial vehicles", Administration's paper submitted to Legislative Council Panel on Environmental Affairs, September 2013. <http://www.legco.gov.hk/yr12-13/english/panels/ea/papers/ea1002cb1-1820-1-e.pdf>

² Environment Protection Department, 2011 Hong Kong air pollutants emission inventory, http://www.epd.gov.hk/epd/english/environmentinhk/air/data/emission_inve.html

³ Environmental Protection Department, (2013) "Retirement of pre-Euro IV diesel commercial vehicles", Administration's paper submitted to Legislative Council Panel on Environmental Affairs, May 2013. <http://www.legco.gov.hk/yr12-13/english/panels/ea/papers/ea0515cb1-1003-1-e.pdf>

⁴ *ibid*

Civic Exchange therefore hope that the transport trade and the honourable members of the Legislative Council will see urgency in passing this proposal for the greater benefit of society, so that roadside air quality will be improved as soon as possible.

Inspection and maintenance are important to keep the vehicles clean over their lifetime

5. Civic Exchange also wants to emphasise the importance of vehicle inspection and maintenance (I/M) to long-term vehicle emissions control, even if the new replacement vehicles meet the Euro V emissions standard, which is the current mandatory standard in Hong Kong for newly registered vehicles. A recent Civic Exchange report *A Review of the Hong Kong Inspection and Maintenance Programme for On-road Vehicles*⁵ argues that poorly maintained vehicles will contribute a significant level of air pollution, much higher than what is expected from a well-serviced vehicle of the same emissions standard.
6. To keep up vehicles' performance (for examples, emissions level and fuel efficiency), EPD and Transport Department have to work closer together to upgrade Hong Kong's vehicle I/M programme. It is also important to inform vehicle owners, fleet managers, and driver the benefits of I/M, as well as to train up car mechanics.
7. Specifically, the current I/M tests for diesel vehicles used by the government (free acceleration opacity test and lug-down opacity test) cannot serve the purpose of effectively identifying diesel vehicles with excessive NO_x and RSP emissions. Civic Exchange recommends the government to develop and adopt a new I/M tests for diesel vehicles that would measure pollutants generated from the use of advanced emission control technologies, and under a loaded condition.

Simon K W Ng
Head of Transport and Sustainability Research
Civic Exchange

⁵ Fung, F and Suen, B, (2013) *A Review of the Hong Kong Inspection and Maintenance Programme for On-road Vehicles*, Civic Exchange, August 2013.
http://www.civic-exchange.org/wp/wp-content/uploads/2013/08/20130805IMreport_en1.pdf