

**Panel on Environmental Affairs
Subcommittee on Improving Air Quality**

**The Administration's Response to Issues Raised
at the Subcommittee Meeting on 6 January 2012
regarding Retrofit Air-conditioning Systems for Motor Vehicles**

- (1) To advise whether the Environmental Protection Department (EPD) will engage the transport trades to test out the performance of the two retrofit devices developed by the Hong Kong Productivity Council (HKPC) and Hong Kong Polytechnic University/Green Power Industrial Limited (PolyU/Green Power) for enabling the air-conditioning system to run after the engine of a vehicle is switched off. If so, the plan to carry out such test.**

- (3) To advise the assistance, including financial subsidy, to be provided by the Administration to facilitate testing/use of the devices by the trades and the general public.**

As part of their product development and verification, HKPC and PolyU/Green Power have already successfully engaged the local transport trades to test their retrofit devices under local operating conditions. As far as we know, the tests undertaken by PolyU/Green Power involve two corporate goods vehicles, a light bus and a taxi, while HKPC a taxi. These tests will provide useful local trial data for the two product developers to refine their products as necessary, and to explain to the local transport trades the applicability of the products to their vehicles including the potential savings in fuel consumption and other environmental benefits. Should the local transport trades wish to test out these products in their operation, they may seek subsidy from the Pilot Green Transport Fund (PGTF), which targets public transport operators and goods vehicle owners for testing out green and innovative transport technologies.

To qualify for funding support from the PGTF, the product should significantly outperform its conventional counterparts in emission or fuel economy, but is not yet commonly used in Hong Kong. Each application

may cover a maximum of six items using the same technology, among which up to three may be from the same supplier. As for retrofit devices such as those developed by HKPC and PolyU/Green Power, successful applicants will receive a grant of 75% of the cost of the product and the installation, up to a maximum of \$1.5 million per item and \$9 million per application. Total grants to each applicant shall not exceed \$12 million. In determining the priority of items for funding support, the Steering Committee of the PGTF will consider the efficacy of the product in emission reduction and/or fuel economy. Successful applicants will be required to share the trial findings with interested parties including other members of the trades.

- (2) **To enhance public confidence on the effectiveness of the retrofit devices, consideration should be given to allocating suitable vehicles from the Government fleet to test out the two devices. There is also a need for concerted efforts from relevant government departments to facilitate testing of the two devices, particularly the one developed by HKPC which will require the approval of the Transport Department for modification of motor engine.**

The Government Logistics Department, Electrical and Mechanical Services Department and EPD have obtained detailed information from HKPC and PolyU/Green Power on their retrofit systems, and will examine the feasibility of installing them on Government vehicles.

The Transport Department (TD) has already been handling expeditiously the applications from HKPC and PolyU/Green Power for installing the retrofit devices in vehicles based on roadworthiness considerations.

- (4) **To advise if there are other emerging alternative technologies, developed by both local and overseas organizations, which are comparable to the two retrofit devices in question.**

We are not aware of any alternative technologies under development that are comparable to the systems developed by HKPC and PolyU/Green Power. So far TD has not received any other applications for safety

vetting of similar devices to be retrofitted on vehicles for use in Hong Kong. We are ready to render assistance to parties who would like to bring in similar products for local use.

Environment Bureau/Environmental Protection Department
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