立法會 Legislative Council

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Panel on Environmental Affairs

Meeting on 24 March 2014

Background brief on "Pilot Green Transport Fund" prepared by the Legislative Council Secretariat

Purpose

This paper sets out the background to the Pilot Green Transport Fund ("the Fund"), and gives a brief account of the views and concerns expressed by Members on the subject.

Background

2. To encourage the transport sector to test out green and low-carbon transport technologies, the Financial Secretary proposed in the 2010-2011 Budget to set up a \$300 million fund for application by the transport industry with a view to improving air quality. The Fund was set up on 30 March 2011 with \$300 million to support the testing of green and innovative technologies applicable to the public transport sector including ferries, taxis, public light buses, vehicles of charitable/non-profit making organisations providing services to their clients, franchised buses and non-franchised public buses, as well as goods vehicles (including special purpose vehicles).

Eligibility for application

Eligible applicants

3. The applicant should be an existing operator in the transport sector with operation based in Hong Kong (including cross-boundary transport) who –

- (a) has been in the relevant transport service for more than one year;
- (b) will likely remain in the service for a reasonable length of time for the trial to bear fruit;
- (c) has the potential to put the new technology under test into wider use in his/her own operation upon successful trial;
- (d) is willing to share the findings of the test with other operators; and
- (e) is not receiving or has not received funding from other Government sources, public bodies or charitable organisations for the same purpose of the application, except the incentive scheme to encourage the early replacement of Euro II diesel commercial vehicles and the tax incentive scheme to encourage the use of environment-friendly commercial vehicles.

Assessment criteria of technologies

- 4. The green and innovative technology qualified for support of the Fund will have to
 - (a) work on sound scientific principles;
 - (b) outperform its conventional counterpart by emitting significantly less air pollutant or greenhouse gas, or demonstrating much better fuel economy. However, regular upgrading of emission performance of conventional fossil fuel vehicles in accordance with the prevailing international standards (e.g. European standards) should not generally be qualified for application;
 - (c) be not commonly or widely used for day-to-day operation in the relevant transport trade locally;
 - (d) be affordable to the transport trades in respect of capital and operation costs;
 - (e) be likely able to cope with the local operating conditions such as hilly terrain, hot and humid climate, intensity of operation, etc.;

- (f) be not violating any statutory requirements such as roadworthiness, fire safety, etc. and can satisfy the approval requirements of the relevant regulatory authorities; and
- (g) be not for research purpose.
- 5. Broadly speaking, the technologies to be supported may involve one or more of the following products
 - (a) alternative-fueled vehicles such as hybrid vehicles, plug-in hybrid vehicles, electric vehicles, etc.;
 - (b) after-treatment emission reduction devices such as diesel particulate filters, selective catalytic reduction devices, exhaust gas recirculation systems, wet scrubbers, etc.;
 - (c) fuel saving devices; or
 - (d) conversion of in-use conventional vehicles to alternative-fueled vehicles.

Steering Committee

6. A Steering Committee, which is chaired by Professor Timothy TONG, President of The Hong Kong Polytechnic University, and comprised of members from academic institutions, transport trades, as well as the relevant government representatives, has been set up to assess and advise on applications received under the Fund. An independent assessor has been engaged to monitor and evaluate the operational performance of the trial products.

Subsidy level

7. The Fund only subsidizes the capital cost of the green and innovative technology product proposed for trial but not the associated recurrent expenditure. A transport operator may apply to the Fund to try out different green and innovative products subject to a maximum subsidy of \$9 million for each application and \$12 million in total. Details of the subsidy levels and caps for various technologies are set out in **Appendix I**.

Approved trials

8. As of 18 February 2014, 73 trials have been carried out under the Fund for the testing of 24 electric taxis, two electric light buses, 11 electric buses, 35 electric goods vehicles, 41 hybrid goods vehicles, 12 hybrid light buses, the retrofitting of four bus engines and others amounting to a total subsidy of about \$93 million. One hybrid public light bus, one electric taxi, two electric buses, 16 electric goods vehicles and 24 hybrid goods vehicles subsidized by the Fund were being tested by various transport operators.

Deliberations by Members

Discussion by the Panel on Environmental Affairs

9. The Panel on Environmental Affairs ("the Panel") was consulted on the implementation framework of the Fund and the relevant funding proposal at its meeting on 20 December 2010. While welcoming the establishment of the Fund, some members stressed the need to foster closer cooperation between researchers and the transport trades so that emerging green transport technologies could be tested out in local conditions. However, they considered the scope of the Fund too narrow and suggested that academia or researchers who had the expertise in identifying suitable green and innovative technologies for testing out by transport operators should also be covered. Some other members were concerned that the Fund would only benefit major transport enterprises rather than individual operators, and that there might be difficulties in providing justifications on the selection of and the cost associated with the testing of product(s) involving propriety technology available from a single supplier. The relevant funding proposal was approved by the Finance Committee on 28 January 2011.

Discussion by the Subcommittee on Issues Relating to Air, Noise and Light Pollution

10. At its meeting on 16 April 2013, the Subcommittee on Issues Relating to Air, Noise and Light Pollution ("the Subcommittee") noted that to boost the confidence of public transport operators in the use of electric vehicles, the Fund had been set up in March 2011 to provide subsidy to the trade to conduct trials on different types of electric vehicles. Since the use of electric vehicles in Hong Kong was still at a very preliminary stage, the Administration would study whether a comprehensive switch of different types of vehicles, including taxis, light buses and buses, to electric ones could meet their respective operational needs and work

out the next steps. In its report, the Subcommittee has recommended that the Administration should expedite the study with a view to promoting the use of electric vehicles on a wider scale to reduce vehicle emissions.

Council questions

11. Hon KAM Nai-wai, Hon CHAN Hak-kan and Hon IP Kin-yuen raised questions relating to the Fund at the Council meetings on 2 and 23 November 2011, and 4 December 2013. Details of the Council questions are hyperlinked in **Appendix II** for ease of reference.

Latest development

12. The Administration will brief the Panel on the Fund at its meeting on 24 March 2014.

Relevant papers

13. A list of relevant papers is set out in **Appendix II**.

Council Business Division 1
<u>Legislative Council Secretariat</u>
21 March 2014

Appendix I

Subsidy levels and caps for Pilot Green Transport Fund

Green and innovation technology product	Subsidy level	Subsidy cap
(a) Alternative-fueled vehicles		
(i) Subsidy per vehicle	(i) Price premium between the alternative-fueled vehicle and the conventional vehicle or 50% of the cost of the alternative-fueled vehicle, whichever is higher	\$3 million per vehicle, and \$9 million per application
(ii) Related support systems	(ii) 50% of setting up cost	
(b) Conventional vehicles		
(i) After-treatment emission reduction devices;	75% of the cost of the device including installation or the vehicle conversion cost	\$1.5 million per device or vehicle conversion, and
(ii) Fuel saving devices; or		\$9 million per application
(iii) Conversion of in-use conventional vehicles to alternative-fueled vehicles		
(c) Ferries Engine retrofit or testing of alternative-fueled engine	75% of the device or engine including installation	\$3 million per engine or device, and \$9 million per application

List of relevant papers

Council/ Committee	Date of meeting	Paper
Panel on Environmental Affairs	20 December 2010	Administration's paper on "Pilot Green Transport Fund" (LC Paper No. CB(1)782/10-11(03)) http://www.legco.gov.hk/yr10-11/english/panels/ea/papers/ea1220cb1-782-3-e.pdf Background brief on "Pilot Green Transport Fund" prepared by the Legislative Council Secretariat (LC Paper No. CB(1) 782/10-11(04)) http://www.legco.gov.hk/yr10-11/english/panels/ea/papers/ea1220cb1-782-4-e.pdf Minutes of meeting (LC Paper No. CB(1)1229/10-11) http://www.legco.gov.hk/yr10-11/english/panels/ea/minutes/ea20101220.pdf
Finance Committee	28 January 2011	Funding proposal on Head 44 – Environmental Protection Department Subhead 700 General non-recurrent New Item "Pilot Green Transport Fund" (LC Paper No. FCR(2010-11)58) http://www.legco.gov.hk/yr10-11/english/fc/fc/papers/f10-58e.pdf Minutes of meeting (LC Paper No. FC12/11-12) http://www.legco.gov.hk/yr10-11/english/fc/fc/minutes/fc20110128a.pdf

Council/ Committee	Date of meeting	Paper
Subcommittee on Issues Relating to Air, Noise and Light Pollution	16 April 2013	Administration's paper on "Current legislation and administrative measures on the control of air pollution and the associated public expenditure" (LC Paper No. CB(1)474/12-13(01)) http://www.legco.gov.hk/yr12-13/english/panels/ea/e a_anlp/papers/ea_anlp0129cb1-474-1-e.pdf Administration's response to questions raised at the the meeting on 16 April 2013 (LC Paper No. CB(1)1000/12-13(02)) http://www.legco.gov.hk/yr12-13/english/panels/ea/e a_anlp/papers/ea_anlp0416cb1-1000-2-e.pdf Minutes of meeting (LC Paper No. CB(1)1471/12-13) http://www.legco.gov.hk/yr12-13/english/panels/ea/e a_anlp/minutes/anlp20130416.pdf
Subcommittee on Issues Relating to Air, Noise and Light Pollution	Issued on 27 February 2014	Report of the Subcommittee on Issues Relating to Air, Noise and Light Pollution to the Panel on Environmental Affairs (LC Paper No. CB(1)1003/13-14(01) http://www.legco.gov.hk/yr13-14/english/panels/ea/ea_anlp/reports/ea_anlpcb1-1003-1-e.pdf

Hyperlinks to relevant Council Questions:

Date	Council Question
2 November 2011	Council question raised by Hon KAM Nai-wai http://www.info.gov.hk/gia/general/201111/02/P201111020178.htm
	http://www.mio.gov.nk/gia/general/201111/02/1201111020176.htm
23 November 2011	Council question raised by Hon CHAN Hak-kan
	http://www.info.gov.hk/gia/general/201111/23/P201111230255.htm
4 December 2013	Council question raised by Hon IP Kin-yuen
	http://www.info.gov.hk/gia/general/201312/04/P201312040497.htm