

立法會 *Legislative Council*

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Report of the Panel on Environmental Affairs for submission to the Legislative Council

Purpose

This report gives an account of the work of the Panel on Environmental Affairs (the Panel) during the Legislative Council (LegCo) session 2009-2010. It will be tabled at the meeting of the Council on 14 July 2010 in accordance with Rule 77(14) of the Rules of Procedure of the Council.

The Panel

2. The Panel was formed by a resolution passed by the Council on 8 July 1998 and as amended on 20 December 2000, 9 October 2002, 11 July 2007 and 2 July 2008 for the purpose of monitoring and examining Government policies and issues of public concern relating to environmental and conservation matters. The terms of reference of the Panel are given in **Appendix I**.

3. The Panel comprises 16 members, with Hon Audrey EU and Hon CHAN Hak-kan elected as Chairman and Deputy Chairman respectively. The membership list of the Panel is in **Appendix II**.

Major Work

Air

4. The deteriorating air quality remained high on the agenda of the Panel. In view of the far-reaching implications of air pollution on public health, quality of life and long-term development of Hong Kong, members agreed that the Subcommittee on Improving Air Quality set up under the Panel should continue to enable more focused discussion on Government's efforts in addressing air pollution.

5. China is a Party to the United Nations Framework Convention on Climate Change and the Kyoto Protocol (an international agreement linked to the Convention which commits industrialized countries to stabilize the emissions of greenhouse gases

(GHG)). These international agreements have been extended to Hong Kong with effect from May 2003. Under the Convention and the Protocol, Hong Kong is required to work jointly with the Mainland to fulfill the obligations imposed upon China. The Panel noted that as part of the Chinese delegation, the Secretary for the Environment and five other government officials attended the United Nations Climate Change Conference 2009 held in Copenhagen, Denmark from 7 to 18 December 2009. The Conference was to determine the future international cooperation framework to address climate change.

6. In November 2009, the Panel received a briefing on the Government's latest initiatives and efforts in addressing climate change with a view to, inter alia, preparing for the Conference. Some members considered it necessary for the Chief Executive to take part in the Conference to demonstrate Hong Kong's commitment and determination in addressing climate change. Other members however did not have high expectation for such international conferences as the member countries were not committed to emission reduction. They held the view that the Government should endeavour to exchange views with international environmental groups participating in the Conference, and identify measures to further reduce carbon emissions in Hong Kong which were on the increase. The Government should also revert back to the Panel upon the delegation's return from the Conference.

7. The outcome of the Conference and the steps to be taken by the Government to tackle climate change were discussed by the Panel in January 2010. According to the Government, while the Conference was not able to reach a legally binding agreement on GHG reduction targets for Annex I Parties, it had taken note of the legally non-binding "Copenhagen Accord" submitted by China, USA, Brazil, South Africa and India to limit the increase in surface temperature of the earth to below 2°C, and to raise finance to kick-start action in the developing world to deal with climate change. A "Copenhagen Green Climate Fund" would also be established to support actions on mitigation, adaptation, technology, reducing emissions from deforestation in developing countries and capacity building etc. As a step forward, the Central People's Government had announced a voluntary national target to reduce carbon intensity by 40% to 45% as compared with 2005 level, which would be pursued irrespective of the outcome of the United Nations negotiation. To achieve the national voluntary target locally, Hong Kong had tasked the consultant responsible for the Climate Change Consultancy Study on Hong Kong to conduct additional modeling work on possible mitigation options in the light of the voluntary national target. Initial modelling results of the Study indicated that Hong Kong would need to introduce a more aggressive climate change strategy comprising measures to change the fuel mix for power generation, cut energy demands through energy efficiency programmes, and put up the necessary infrastructure to apply the low carbon city concept in new development areas etc.

8. While acknowledging that Hong Kong was not obliged to contribute to the Fund as China was a non-Annex I Party, the Panel considered that Hong Kong should do so for the protection of the environment. Given that electricity generation accounted for over 60% of Hong Kong's GHG emissions, some members opined that

there was an imminent need to expedite the change in fuel mix from coal to gas. Consideration should be given to opening up the electricity market to enable the supply and use of surplus nuclear energy from the Mainland with a view to reducing local carbon emissions. Other members were disappointed that despite repeated calls for developing green transport policies, not much progress had been made so far. This was evidenced by the slow progress in the rationalization of bus routes, extension of the coverage of green transport systems, replacement of petrol vehicles by electric ones, and wider adoption of biofuels as motor fuels etc.

9. Hong Kong has joined the C40 Cities Climate Leadership Group, which is a voluntary group of the world's largest cities that have pledged to take action on climate change. Since then, Hong Kong has been participating in various C40 events and initiatives, including the C40 Seoul Summit in May 2009. Arrangements are being made to hold a C40 workshop in Hong Kong from 5 to 6 November 2010.

10. The Panel generally supported the holding of the C40 workshop in Hong Kong. When the matter was discussed in January 2010, some members hoped that representatives from the Pearl River Delta (PRD) Region could also attend the workshop to facilitate exchanges on regional cooperation to tackle climate change. The Panel's participation was also considered necessary. The Government was requested to take note of these views and relay to the organizing committee the need for public engagement to gather views from different sectors of the community on low carbon living and climate change, including the increased use of natural gas for power generation and their willingness to pay for cleaner air.

11. The transport sector is the second largest air pollution source in Hong Kong, accounting for about 6% of the local emissions of sulphur dioxide and 37% of respirable suspended particulates and nitrogen oxides. The share of the transport sector in respect of GHG is about 16% of local emissions. To reduce vehicular emissions, the Government has tightened the motor vehicle diesel and unleaded petrol to Euro IV standards in 2002 and 2005 respectively. It also implemented Euro IV vehicle emission standards in phases from January 2006, in tandem with the European Union.

12. To further reduce vehicular emissions, the Government proposed to tighten the specifications of motor vehicle diesel and unleaded petrol to Euro V level with effect from 1 July 2010. The proposal was discussed by the Panel in November 2009. The Panel noted that the emissions of carbon monoxide, nitrogen oxides and hydrocarbons of existing petrol vehicles would be reduced by about 10% with the use of Euro V petrol, and that the respirable suspended particulates of existing diesel vehicles would be reduced by 5% with the use of Euro V diesel. While supporting the use of cleaner fuels to help reduce vehicular emissions, some members were concerned about the compatibility of Euro V fuels with existing vehicles. These members suggested that the Government should ascertain the effect of the switch on the performance of Euro I, II and III vehicles, and consult the transport trades in respect of the compatibility of vehicles with Euro V fuels. Other members enquired if the Government was prepared to introduce concessionary fuel duty for Euro V

petrol, in line with that for Euro V diesel, to encourage the switch. The Government should also put in place measures to safeguard consumers' interests and avoid profiteering by oil companies which might increase the price of Euro V petrol.

13. To encourage the transport sector to test out green and low-carbon transport technologies, the Financial Secretary announced in the 2010-2011 Budget Speech that a \$300 million Pilot Green Transport Fund (PGTF) would be set up to encourage the transport industry to introduce more innovative green technologies, contributing to better air quality and health of people living in Hong Kong. The Panel was consulted on the implementation framework of PGTF in April 2010. Given that green transport technologies were readily available overseas, some members held the view that PGTF should aim at testing out their suitability for day-to-day operation in Hong Kong. In vetting PGTF applications, care should be taken to avoid circumstances where funding was approved for certain technologies which were later found to be impractical for use in Hong Kong. For this purpose, a committee should be set up to invite expert views on the types of technologies to be introduced to Hong Kong. Clear guidelines should also be worked out for PGTF to avoid overlapping with other incentive schemes targeting at encouraging replacement of polluting vehicles. The Government was requested to revert to the Panel once the implementation details had been worked out.

14. The key findings of the public consultation on the Review of the Air Quality Objectives (AQOs) were discussed at the Panel meeting in June 2010. Given the divergent views received during the public consultation, members enquired about the actions which the Administration would take to resolve the differences with a view to reaching a consensus on the timeline on implementation of the proposed measures for attaining the proposed new AQOs, and adoption of the ultimate targets set out in the World Health Organization air quality guidelines. To enable more thorough discussion, members agreed that the subject should be followed up by the Subcommittee on Improving Air Quality.

Energy efficiency and conservation

15. As reducing electricity consumption of buildings was instrumental in bringing down GHG, the Building Energy Efficiency Funding Schemes under the Environment and Conservation Fund were set up to subsidize building owners to carry out energy-cum-carbon audits and energy efficiency projects. The progress of these Schemes was discussed by the Panel in April 2010. According to the Government, a total grant of \$76 million had been approved for 346 applications. The approved projects would lead to a saving in electricity consumption of 47.3 million kWh per annum, which was equivalent to a reduction of 33 100 tonnes of carbon dioxide emissions. While supporting the Schemes, some members were concerned about the high rejection rate. They held the view that a more proactive approach should be adopted to facilitate applications if it was the Government's intention to encourage owners to improve the energy efficiency of their building services installations. The guidelines on applications should be more explicit about the building services installations which would be eligible under the Schemes to avoid any misunderstanding on the part of applicants. Consideration should also be given to

providing loans to building owners who could not afford the capital cost for energy efficiency projects even with the assistance under the Schemes. The loans could be recovered from the savings in electricity consumption.

16. Air conditioning accounts for 32% of Hong Kong's electricity consumption. The use of more efficient air conditioning systems would be an effective measure to conserve energy and reduce GHG. The implementation of a District Cooling System (DCS)¹ at the Kai Tak Development (KTD) will be able to achieve a maximum annual saving in electricity consumption up to 85 million kWh, with a reduction of 59 500 tonnes of carbon dioxide emission per annum. In June 2009, the Finance Committee approved the upgrading of DCS at KTD to Category A at an estimated cost of \$1,671 million in money of the day prices. The project was intended to be carried out under a single Design, Build and Operate (DBO) contract spanning over 17 years. Given that the returned tender prices of both the project costs and the operation costs far exceeded the original estimates, the Administration had reviewed the procurement strategy and proposed to adopt a phasing approach in procuring the DCS development and operation. The alternative procurement strategy was discussed at the Panel meeting in June 2010. Panel members found it difficult to support the proposal in the absence of detailed information, including the returned tender prices, the anticipated increase in project costs under the alternative procurement strategy etc. To enable more meaningful discussion, the Panel decided to hold another meeting and requested the Administration to provide supplementary information, inter alia, on the feasibility of DBO procurement mode, which had been found to be problematic in a number of sewerage projects, the difference in costs if DCS was to be carried out using the DBO procurement mode and the conventional consultant-design-contractor-build approach, as well as the estimated costs for the different phases under the alternative procurement strategy.

Waste management

Management of municipal solid waste

17. In December 2005, the Government published "A Policy Framework for the Management of Municipal Solid Waste (2005-2014)". The Policy Framework set out a comprehensive strategy consisting of a series of tried and proven policy tools and measures to tackle the waste problem ahead, and to achieve the targets of waste avoidance. These targets were -

- (a) to reduce the amount of MSW generated in Hong Kong by 1% per annum up to the year 2014;
- (b) to increase the overall recovery rate of MSW to 45% by 2009 and

¹ District Cooling System is a very large-scale centralized air conditioning system. It consists of one or more chiller plants to produce chilled water, and a closed loop network of underground pipes for distributing the chilled water to buildings within its service area for air conditioning purpose. The chilled water is pumped to individual buildings for use in their air conditioning systems and is then returned to the central chiller plant for re-chilling.

50% by 2014; and

- (c) to reduce the total MSW disposed of in landfills to less than 25% by 2014.

The MSW management for the next decade from 2005 to 2014 would place emphasis on community participation and the "polluter-pays" principle.

18. In March 2010, the Panel was briefed on the progress of the key initiatives in the Policy Framework. Noting that the Government had conducted a Baseline Study to collect information on the waste generation and waste management practices of different commercial and industrial establishment in Hong Kong to facilitate the development of possible MSW charging options, members considered it necessary for the Government to publicize the findings of the Study and report to the Panel on the outcome of the Study. They also urged the Government to step up waste reduction and recycling with a view to dispensing with the need for landfills, given that the three strategic landfills were approaching their capacity, and that there might not be enough land for the development of landfills. Consideration should also be given to adopting the most advanced incineration technologies for the Integrated Waste Management Facilities to significantly reduce the size of waste loads.

19. Enshrining the "polluter pays" principle, the producer responsibility scheme (PRS) was a key policy tool in the Policy Framework for waste reduction, recovery and recycling. The Product Eco-responsibility Ordinance (Cap. 603) was enacted in July 2008 to provide a legal basis for implementing PRSs in Hong Kong. The environmental levy scheme on plastic shopping bags (PSB) was the first scheme to be implemented under the Ordinance. In his 2009-2010 Policy Address, the Chief Executive identified waste electrical and electronic equipment (WEEE) as the next target for a PRS. In January 2010, the Government embarked on a three-month public consultation on the introduction of a mandatory PRS on WEEE. In gist, the proposed WEEE Scheme will cover television sets, washing machines, refrigerators, air conditioners, and computer products (including desktops, laptops, printers, scanners and monitors), which account for about 86% of WEEE generated in Hong Kong.

20. The Government proposed to amend the Waste Disposal Ordinance (Cap. 354) to ban disposal of all regulated WEEE as ordinary trash. Under the proposed WEEE Scheme, when purchasing new regulated products, consumers would need to contribute to the cost of collecting and treating the regulated WEEE. Importers, distributors or retailers would need to ensure that the regulated products to be sold were affixed with specified labels, representing the contributions to the costs of the WEEE Scheme. When a new regulated product is purchased by a consumer, retailers will need to take back their equivalent old equipment (including equipment bought before the introduction of the Scheme) free of charge on a "new for old" basis. The retailer's take-back obligation will deem to have discharged if consumers choose to keep the old equipment for continued use or dispose of it through alternative means. Permit controls will be applied to the import and export of used regulated products

and regulated WEEE on environmental considerations. A licensing requirement for processing and storage of used regulated products and regulated WEEE will also be introduced to properly manage the potential environmental hazard arising from these activities.

21. The Panel held a series of meetings during the period from January to March 2010 to discuss the proposed mandatory PRS on WEEE. Deputations, including the trades and green groups, were invited to express their views on the proposal. While supporting the need for proper handling of WEEE, members were concerned about the lack of incentives and Government participation in the WEEE Scheme. They considered that the Government should take a more proactive role by providing land for the WEEE treatment plants and sharing the treatment cost etc. Other members considered the proposed collection of fee by retailers at the point of sale not acceptable as this would likely increase the price of the regulated products. As the Consultation Document did not provide details on the operation of the Scheme as well as impacts on stakeholders (consumers, importers, distributors, retailers and second-hand dealers), some members pointed out that the trades would need to know more about the collection and treatment of WEEE. The Government should also consider whether it would undertake the more difficult detoxification process if this could not be done by private contractors, and whether the anticipated fee was sufficient to cover the treatment cost. The mandatory take-back by retailers free of charge on a “new for old” basis might also exclude existing recyclers and second-hand dealers from participating in the Scheme, thereby affecting their livelihood. Given that some regulated products were sold to overseas visitors or domestic workers returning to their homeland, it would be unfair if they had to pay for the treatment of these products which would not be disposed of or treated in Hong Kong.

Depositing of abandoned construction and demolition materials on private land

22. The problem of fly-tipping and land filling activities had all along been a public concern. Given the inadequacy of the existing regulatory regime in controlling these activities, many parts of the New Territories had become dumping grounds, causing unacceptable impacts on the surrounding. To enable more focused discussion on Government’s efforts in tackling fly-tipping, a Subcommittee on Combating Fly-tipping was set up under the Panel.

23. Taking into account the difficulties in adducing evidence on illegal depositing of construction and demolition (C&D) materials on private land, and the possible infringement of landowners’ interest by depositing activities conducted without their consent, the Government proposed to amend the Waste Disposal Ordinance (Cap. 354) (WDO) to enhance the enforcement effectiveness of the legislation, and to safeguard the interest of private landowners to prevent the occurrence of possible environmental problems and other problems that might arise from illegal depositing activities. The amendments would require any person who intended to carry out depositing activity on land held under private ownership to obtain prior written permission of all landowner(s) concerned, and to carry such written permission or its copy during the depositing activity for inspection at the

request of the control authority. The landowner should also give the written permission on a specified form, and submit the completed form together with the prescribed document to the Environmental Protection Department 15 working days before the commencement of the intended activity. However, exemption would be granted if the deposition involved an aggregate area of less than 100 square metres on the same lot over a period of time.

24. The proposed amendments to WDO were discussed by the Panel in February 2010. While agreeing that the proposed amendments were a step forward in the right direction, some members expressed concern that landowners could circumvent the new notification requirement by claiming that the C&D materials deposited on their land were for storage purposes. To plug the loophole, consideration should be given to reviewing the definition of waste under WDO, and increasing the penalties for illegal depositing activities to enhance the deterrent effect. As regards the proposed exemption for depositing activities involving an aggregate area of less than 100 square metres, some members were worried that it might encourage smaller-scale depositing activities to be scattered in different areas.

Sewage

25. The Harbour Area Treatment Scheme (HATS) aimed at improving the water quality of Victoria Harbour through the implementation of an integrated sewerage system that collected all the sewage from both sides of the harbour in an effective and environmentally sustainable manner. Stage 1 of HATS was completed in 2001 and collected 75% of the sewage from Kowloon and the north-eastern part of Hong Kong Island for treatment at the Stonecutters Island Sewage Treatment Works (SCISTW). HATS stage 2A was to collect the remaining 25% of harbour area sewage not handled under Stage 1, and it comprised the construction of a sewage conveyance system to collect sewage from the northern and south-western parts of Hong Kong Island for centralized treatment at the expanded SCISTW.

26. The proposal to upgrade SCISTW and preliminary treatment works was discussed by the Panel in December 2009 and January 2010. Though concerned about the effectiveness of HATS stage 1 and stage 2A in achieving the targeted improvements in water quality, some members opined that there would be no choice but to continue with the remaining part of stage 2A given that HATS stage 1 had been completed and stage 2A was already underway. Noting that the Mainland and Macau had adopted secondary treatment for effluent, the Government was urged to expedite the provision of biological treatment facilities under HATS stage 2B.

27. The Panel also considered a number of sewerage projects proposed by the Government. While agreeing that these works projects should be expedited to improve the environment and to create job opportunities for local workers, members expressed concern about the need for land resumption and urged the Government to proceed to consult the relevant stakeholders as soon as possible. Members also opined that to ensure proper connections to the public sewerage, particularly for village houses, consideration should be given to providing villagers with the needed

financial assistance to proceed with the connections.

Nature conservation

28. Hong Kong has a diverse assemblage of marine organisms. Marine parks are set up to protect and conserve the marine environment for the purposes of conservation, education and recreation. To improve ecosystems in marine parks and offer better protection for marine organisms, the Government consulted the Panel in January 2009 on the policy initiative to ban commercial fishing in marine parks. While supporting the need to protect and conserve marine habitats, members were concerned that the initiative would affect the livelihood of those fishermen who conducted fishing activities in marine parks. The Government was requested to consult the affected fishermen and report to the Panel outcome of the consultation.

29. The Panel held two meetings in November and December 2009 to discuss the latest development of the proposed ban of commercial fishing in marine parks. Deputations, including fishmen associations and green groups, were also invited to express their views. According to the Government, it had consulted the relevant fishermen associations on the proposal, and they indicated that the Government should put in place suitable measures to alleviate the impacts of the ban if it was to be implemented. The suggested measures included the provision of Ex-Gratia Allowance (EGA) to affected fishermen and other assistance, such as deploying more artificial reefs in Hong Kong waters to increase fishery resources, reducing the size of the proposed marine parks, and assisting fishermen who were willing to switch to other businesses to engage in activities like ecotourism. The Government informed the Panel that it would make reference to the established EGA mechanism for fishermen affected by marine development works, the amount of which would be equivalent to the notional value of seven years' fish catch. An Inter-departmental Working Group would also be set up to handle all EGA applications by fishermen affected by the ban.

30. Most of the deputations were opposed to the proposed ban. Some members pointed out that the main causes for depletion of the fishery resources in Hong Kong were illegal cross-boundary fishing activities and illegal dumping activities rather than commercial fishing by local fishermen. The proposed ban therefore would not serve the intended purpose. As the proposal would adversely affect the livelihood of fishermen, these members found it difficult to support the proposal unless comprehensive policies were worked out to ensure the sustainable development of the local fishery industry.

Environmental issues pertaining to the Framework Agreement on Hong Kong/Guangdong Co-operation

31. In January 2009, the National Development and Reform Commission promulgated the "Outline of the Plan for the Reform and Development of PRD" (the Outline), establishing Hong Kong/Guangdong co-operation as a national policy. To take forward the implementation of the Outline, the Chief Executive and the Governor

of Guangdong Province signed the Framework Agreement on Hong Kong/Guangdong Co-operation (the Framework Agreement) on 7 April 2010 in Beijing. In respect of environmental protection and ecology conservation, the Framework Agreement has included the co-operation initiatives being undertaken or actively considered by the Hong Kong and Guangdong sides. The objectives are to improve the regional environmental quality, and to transform the PRD region into a Green Quality Living Area. Key areas of co-operation under the Framework Agreement include concerted actions to prevent and tackle air pollution, enhance cleaner production in the region, promote wider use of electric vehicles, co-operation in protection marine water quality, promote the development of circular economy, and co-operation in ecology and marine resource conservation.

32. The co-operation areas on environmental protection and ecology conservation under the Framework Agreement were discussed at the Panel meeting in May 2010. Some members expressed concern that the Government had not consulted the public before signing the Framework Agreement. These members further pointed out that the chapter on water, electricity and energy infrastructure network under the Framework Agreement was relevant to the quality living area since the use of clean energy would help improve air quality. In view of the growing momentum on the use of electric vehicles in the Mainland, the Government was urged to formulate a comprehensive plan to concurrently promote the wider use of these vehicles in Hong Kong. It was also hoped both the Government and the Guangdong Provincial Government could jointly request the Central People's Government to tighten the fuel standards to National V with a view to further improving the regional air quality. As concerted efforts would be required to take forward the Framework Agreement, members agreed that deputations should be invited to express their views, particularly on public participation, at a forthcoming meeting.

33. From October 2009 to June 2010, the Panel held a total of 15 meetings, including one joint meeting with the Panel on Development and two joint meetings with the Panel on Transport. During the period, the Subcommittee on Improving Air Quality and the Subcommittee on Combating Fly-tipping also held three and four meetings respectively.

Legislative Council

Panel on Environmental Affairs

Terms of Reference

1. To monitor and examine Government policies and issues of public concern relating to environmental matters (including those on energy), conservation and sustainable development.
2. To provide a forum for the exchange and dissemination of views on the above policy matters.
3. To receive briefings and to formulate views on any major legislative or financial proposals in respect of the above policy areas prior to their formal introduction to the Council or Finance Committee.
4. To monitor and examine, to the extent it considers necessary, the above policy matters referred to it by a member of the Panel or by the House Committee.
5. To make reports to the Council or to the House Committee as required by the Rules of Procedure.

**Legislative Council
Panel on Environmental Affairs**

Membership list for 2009-2010 session

Chairman	Hon Audrey EU Yuet-mee, SC, JP
Deputy Chairman	Hon CHAN Hak-kan
Members	Ir Dr Hon Raymond HO Chung-tai, SBS, S.B.St.J., JP Hon James TO Kun-sun Hon WONG Yung-kan, SBS, JP Hon Miriam LAU Kin-yee, GBS, JP Hon Andrew CHENG Kar-foo Hon LEE Wing-tat Hon Jeffrey LAM Kin-fung, SBS, JP Hon CHEUNG Hok-ming, GBS, JP Prof Hon Patrick LAU Sau-shing, SBS, JP Hon KAM Nai-wai, MH Hon Cyd HO Sau-lan Hon CHAN Kin-por, JP Hon Tanya CHAN (up to 28 January 2010)(rejoined on 18 May 2010) Hon Albert CHAN Wai-yip (up to 28 January 2010)(rejoined on 19 May 2010)
	(Total : 16 Members)
Clerk	Miss Becky YU
Legal Adviser	Miss Kitty CHENG
Date	19 May 2010