For discussion on 27 January 2014

LEGISLATIVE COUNCIL PANEL ON ENVIRONMENTAL AFFAIRS

2014 POLICY ADDRESS POLICY INITIATIVES OF ENVIRONMENT BUREAU: ENVIRONMENTAL PROTECTION

PURPOSE

This paper sets out the policy initiatives of the Environment Bureau (ENB) and the Environmental Protection Department (EPD) as regards environmental protection in the 2014 Policy Address.

NEW INITIATIVES

Air Quality

Roadside Air Quality

- 2. Tackling roadside air pollution is our priority. The Government will offer eligible vehicle owners an ex-gratia payment ranging from 27% to 33% of the average taxable values of new vehicles for phasing out some 82,000 diesel commercial vehicles (DCVs) below Euro IV emission standards by end-2019. The ex-gratia payment amounts to some \$11.44 billion and will correlate inversely with the age of the vehicles to be phased out. We will accept applications for ex-gratia payment starting from March 2014. The Air Pollution Control (Air Pollutant Emission) (Controlled Vehicles) Regulation will commence operation on 1 February 2014 to specify the retirement deadlines of pre-Euro IV DCVs. Newly registered DCVs will have a service life limit of 15 years to ensure timely replacement of vehicles in the long run.
- 3. We will also launch a pilot scheme to enable electric taxi suppliers to set up quick chargers in car parks administered by the Transport Department.

Up to some 50 quick charging points can be installed at these car parks. In addition, the Government will establish 100 medium-speed chargers to shorten the charging time of electric vehicles.

Regional Air Quality

- 4. The Government will strengthen further its co-operation with Guangdong and Macao authorities to enhance the Guangdong-Hong Kong-Macao Pearl River Delta Regional Air Quality Monitoring Network with a view to providing more comprehensive air quality information to the public. The relevant authorities will also commence a joint study on fine suspended particulates (PM2.5) for the Pearl River Delta region, to provide robust scientific basis in mapping out the strategies for further improvement of the regional air quality.
- 5. We shall explore with Guangdong on co-operation in air pollution forecasting and joint effort in promoting regional air pollution prevention.

Power Sector Emissions

6. The third technical memorandum setting out emission caps on power plants under the Air Pollution Control Ordinance starting from 2017 was promulgated in 2012. We shall review the third technical memorandum in 2014 with a view to tightening the caps from 2019 onwards.

Waste Management

Support to the Recycling Industry

7. Effective and sustainable recycling operations are an essential component in our waste management system. In support of the sustainable development of the recycling industry, we have earmarked \$1 billion to set up a Recycling Fund. The Steering Committee to Promote the Sustainable Development of the Recycling Industry (Steering Committee) chaired by the Chief Secretary for Administration will study the specific uses of the fund in consultation with stakeholders. The Steering Committee is also examining ways to promote the sustainable growth and development of the recycling industry such as training and development of the industry's workforce, encouraging research and investment in relevant technologies, facilitating the supply of suitable sites for recycling operations, fostering community support for recycling and enhancing the collection network of recyclables.

8. Subject to approval by the Finance Committee, a new Waste Reduction and Recycling Division will be set up in EPD in the 2014-15 financial year on a time-limited basis to support the formulation and implementation of measures to promote recycling and the industry.

Revitalising Restored Landfills

There are currently 13 fully restored landfills; parts of them have 9. either been developed into recreational facilities or reserved for conservation purposes. This successful experience showcases that restored landfills can be turned into gainful and pleasant facilities for use by the general public. provide certainty to such development so that the community could reap the benefits of their after-use at the earliest opportunity, we have earmarked \$1 billion to set up a Restored Landfill Revitalisation Funding Scheme for application by non-profit organisations or national sports associations with proven track records in the development of recreational facilities or other innovative proposals at restored landfills. In addition to funding support for the construction work, consideration will be given to support the operational costs of the initial operation. Currently, some parts of the restored landfill sites at Pillar Point Valley, Tseung Kwan O Stage I, Tseung Kwan O Stage II/III, Ma Yau Tong Central, Ma Yau Tong West and Ngau Tam Mei have potential for the development of recreational or other innovative proposals. We would engage stakeholders and formulate funding guidelines for consultation with the Panel in due course.

Strategy on Food Waste and Yard Waste

10. In 2011, we disposed of about 3,600 tonnes of food waste (or 40% of municipal solid waste disposal) each day to the landfills. About 130 tonnes of yard waste were disposed of at landfills each day. We plan to promulgate in the first quarter of 2014 a comprehensive strategy and plan for the reduction, recycling and treatment of food waste and yard waste. It will set out the details of our multi-pronged approach to tackle food waste and yard waste. As regards avoidance, over the years we have supported publicity and public education programmes to promote awareness of food waste avoidance and reduction, such as the 'Save Food Day' and 'Green Lunch Charter'. Through the Food Waste Recycling Partnership Scheme launched in 2010, we have collaborated with the commercial and industrial sectors to promote good food waste management practices and recycle source separated food waste. We have also initiated food waste reduction and recycling programmes in

collaboration with some District Councils. Through the Environment and Conservation Fund, we have provided financial support to schools, community organisations and private housing estates to organise food waste reduction education programmes and to promote food waste recycling. We launched the Food Wise Hong Kong Campaign in May 2013 and the concept of not to be a 'Big Waster' is taking root in the community.

11. For food waste and yard waste that cannot be avoided, they should best be recycled and converted into usable energy and resources. Phase 1 of the Organic Waste Treatment Facility is under tender and it will adopt the technology of anaerobic digestion and composting, which will turn organic waste into biogas and compost. We shall seek funding approval for the project in the next few months. Planning for further phases of organic waste treatment facilities is being pursued.

Community Green Stations

- 12. In early 2013, we announced the plan to develop five pilot community green stations (CGSs) in different parts of the territory to promote environmental/green education and to enhance the collection network of recyclables. We will extend the initiative by progressively setting up a CGS in each of the 18 districts.
- 13. We shall appoint a non-governmental organisation (NGO) by way of tender to operate each CGS which will help green living to take root at the community level. The Government will provide financial support to the NGO operators. Leveraging on their local connections, the NGO operators will collaborate with schools, property management and other relevant stakeholders or institutions on publicity and educational programmes as well as supporting recycling efforts at community level.
- 14. Setting up 18 CGSs will involve a capital expenditure of about \$400 million. The design and construction of CGSs will be both sustainable and aesthetically pleasing. At present, the sites in Shatin and Eastern Districts have been confirmed. We estimate that the CGS in Shatin District will be completed in mid-2014 while other CGSs will be completed by phases in the next three years.

Water Quality

Urban Coastal Waters

- 15. The water quality of Victoria Harbour has been improving over the years with the commissioning of Stage 1 of the Harbour Area Treatment Scheme (HATS) in December 2001 and the Advance Disinfection Facilities at the Stonecutters Island Sewage Treatment Works (SCISTW) in March 2010. The major construction works of HATS Stage 2A will be completed in 2014. All sewage within the Victoria Harbour catchment will be collected and treated at the SCISTW. The water quality of Victoria Harbour will improve further.
- 16. However, due to the residual pollution discharges into the urban coastal waters, i.e. those not collected by our sewerage system due to various factors such as drain misconnections, and polluted surface run-offs from streets etc., the odour and visual impacts caused by near shore pollution to our urban coastal waters are still under frequent complaints, in particular at areas that are easily accessible by the public and close to population and business centres. Upon completion of HATS Stage 2A, near shore pollution in Victoria Harbour will become our priority water quality problem. To deal with it will require measures that can effectively reduce or collect the many residual discharges from a wide range of small sources that are large in numbers in the urban area. We plan to carry out a consultancy study to work out practical options and a programme, to improve the environment of our popular waterfront areas by tackling near shore pollution. We will consult stakeholders in the next few months on the scope and details of the consultancy study and seek funding within the next LegCo session. The implementation of HATS Stage 2B will be kept under review taking into account the water quality situation and the latest technological development in biological treatment.

ON-GOING INITIATIVES

17. We will continue to take forward a wide range of on-going initiatives. A summary is at the **Annex**.

Environment Bureau January 2014

Annex

2014 Policy Address Policy Initiatives of Environment Bureau: Environmental Protection

On-going Initiatives

Areas	Progress
Air Quality	
Vehicles	As at end-2013, the Pilot Green Transport Fund approved 58 trials with subsidies totalling about \$82 million to test out various types of electric vehicles and hybrid vehicles. We shall share the findings of the trials with the transport trades with a view to encouraging them to adopt green vehicles in Hong Kong.
	• We aim to complete the one-off subsidy scheme to assist owners of petrol/liquefied petroleum gas (LPG) taxis and light buses to replace their catalytic converters and oxygen sensors by April 2014. We shall then strengthen control on petrol/LPG vehicle emissions using roadside remote sensing and chassis dynamometer emission testing.
	• Franchised bus companies are procuring electric buses for trial with our funding support. The first batch of electric buses will arrive in late 2014. They are also preparing to retrofit selective catalytic reduction devices to Euro II and III buses and aim to complete the retrofit programme by end-2016.
	• We now have 156 electric vehicles in the Government fleet, and over 70 more units will be delivered in 2014 for use by various departments.
Marine emissions	• We shall introduce legislation to upgrade the quality of locally supplied marine light diesel starting from April 2014. We are also preparing the legislation to mandate ocean-going vessels to switch to low-sulphur fuel while at berth and aim to implement the requirement in 2015. An implementation strategy for

installing onshore power supply system at the Kai Tak Cruise Terminal will be formulated upon completion of a feasibility study in mid-2014.

Crossboundary collaboration

Monitoring results of the Pearl River Delta Regional Air Quality Monitoring Network from 2006 to 2012 show that the average annual concentration levels of sulphur dioxide, nitrogen dioxide and respirable suspended particulates in the region had decreased by 62%, 17% and 24% respectively. The Governments of Hong Kong and Guangdong will continue to pursue air quality improvement measures under the Regional Air Quality Management Plan, which focuses on power plants, motor vehicles and the heavily polluting industrial processes.

Waste Management

Waste reduction

- The Council for Sustainable Development (SDC) will complete the public engagement on municipal solid waste (MSW) charging in January 2014. The SDC will analyse the views collected and formulate recommendations on implementing MSW charging. We shall conduct a trial in some housing estates in order to gain practical experience.
- Complementing the Source Separation of Waste Programme launched in 2005 (under which over 80% of the population now have recycling bins close to where they live and work), we have enhanced the Community Recycling Network with extended recyclables collection points at the district level. In 2014, we shall continue to work with various stakeholders, including District Councils, property green groups, management companies and owners' committees of housing estates to step up promotion on clean recycling within the community. application will be launched to help users locate recyclables collection points at public places and provide interactive features to facilitate public participation in waste reduction and recycling.
- The legislative proposals for extending the Environmental Levy Scheme on plastic shopping bags to the entire retail sector are being considered by the Legislative Council (LegCo). Upon the passage of the Amendment Bill, extensive publicity and

- public education programmes will be launched to prepare the retail trade and the public for the implementation.
- Legislation for the Producer Responsibility Scheme (PRS) on waste electrical and electronic equipment will be introduced to LegCo in the first half of 2014. We shall also seek funding approval for the development of the relevant treatment facility. For the PRS on glass beverage bottles, we shall prepare legislative proposals with reference to the result of public consultation. In parallel, we shall continue to expand the collection network of glass beverage bottles.

Infrastructure

- We are planning the development of modern Organic Waste Treatment Facilities (OWTF) in phases to recycle food waste into biogas for energy recovery and compost products. Subject to funding support from LegCo in the first half of 2014, we plan to commission the first phase of OWTF at Siu Ho Wan of North Lantau with a daily capacity of 200 tonnes by 2016. For the second phase of OWTF at Sha Ling of the North District with a daily capacity of 300 tonnes, we have completed the environmental impact assessment study and we will proceed with tender preparation procedures. We shall continue to look for suitable sites for further OWTFs.
- For the development of waste-to-energy MSW treatment facility, we have continued to engage the local community on the plan for Integrated Waste Management Facility Phase 1. The judicial review against the project was rejected by the Court of First Instance in July 2013. We shall seek funding approval from LegCo in the first half of 2014 to proceed with the pre-qualification and tendering process.
- At present, we rely on three existing landfills to dispose of our waste and even with all the waste reduction and minimisation initiatives implemented, it is estimated that they will be exhausted one by one by 2019. We have an urgent need to extend the three landfills to serve as the final repositories for non-recyclable and residual waste and have to act now as the associated tendering and construction works for landfill extension projects will take several years to complete. We are aware of public concerns on landfill extension projects and will

endeavour to allay them through close communication with relevant parties including the District Councils, local community and other relevant stakeholders.

Nature Conservation

Conservation

- We are formulating a Biodiversity Strategy and Action Plan (BSAP) based on principles of the Convention on Biological Diversity and taking into account local needs and priorities. An exercise to raise public awareness on biodiversity conservation and seek views on the formulation of the BSAP was rolled out in September 2013, to prepare for its implementation in 2015.
- We completed the incorporation of Tai Long Sai Wan, Yuen Tun and Kam Shan Country Park enclaves into existing country parks in 2013. We will continue to assess the suitability of other country park enclaves for incorporation into country parks following established principles and criteria.

Climate Change and Energy Efficiency

Carbon audit

- To take the lead in the promotion of carbon audits as a first step towards carbon reduction, we have conducted energy-cumcarbon audits in about 60 government buildings and public facilities. Work on this front will continue.
- A carbon footprint repository has been developed in the form of a dedicated website. Invitations were issued in December 2013 to encourage all listed companies to use the on-line carbon footprint repository to disclose their carbon performance and to share successful experience in carbon management and practices.

Green buildings

The inter-departmental Steering Committee for the Promotion of Green Building has been studying overseas and local policy initiatives on green buildings, and held a stakeholders engagement forum in 2013 to collect views and suggestions. The Steering Committee will continue to strengthen co-ordination among bureaux and departments with a view to formulating appropriate strategies and recommendations for

further promoting green building in Hong Kong. The Buildings Energy Efficiency Ordinance has been in full operation since September 2012. New buildings and existing buildings undergoing major retrofitting works are required to comply with the Building Energy Code, which stipulates the minimum energy efficiency standards for major building services installations including air-conditioning, electrical works, lighting, and lift and escalator installations. The Code will be regularly reviewed to keep up with latest developments in technology. The minimum energy efficiency standards for lighting installations are being reviewed. The District Cooling System at the Kai Tak Development has begun its initial phase of operation in 2013, and has been providing service to the Kai Tak Cruise Terminal building and Ching Long Shopping Centre. We will continue to oversee its construction and operation to meet the demand for airconditioning of public and private non-domestic developments. External The Task Force on External Lighting has studied the technical lighting standards and parameters as well as implementation approaches adopted by overseas regimes in tackling light nuisance and energy wastage caused by external lighting, and assessed the applicability of those parameters to Hong Kong. The Task Force published in August 2013 the Document for Engaging Stakeholders and the Public to invite views on its findings and proposals. The engagement exercise was closed in November 2013. The Task Force will carefully consider the views received and draw up recommendations on addressing the light nuisance and energy wastage problems that may be caused by external lighting. Energy The Mandatory Energy Efficiency Labelling Scheme currently efficiency covers five types of electrical appliances, making up around 60% of annual electricity consumption in the residential sector. labelling A review of the Scheme is being conducted with a view to expanding the coverage of the scheme and tightening the grading standards. We will draw up a proposal for consultation with the trade.

Others	
Water quality	• With about 80% of the tunnel excavation works for Stage 2A of the Harbour Area Treatment Scheme completed as at end November 2013, we are on course to complete the major construction works within 2014.
Community green actions	• Since the injection of \$5,000 million in 2013 as seeding fund the Environment and Conservation Fund has approved 200 projects with a total commitment of \$100 million, covering energy efficiency, waste recycling, minor works and education aspects. We will continue to provide support for green action initiated by the community.