HKGCC Environment Committee Meeting on 15 March 2005

Environmental Initiatives of 2005 Policy Address
by
Mr K K Kwok, Permanent Secretary for the Environment, Transport and Works

Ladies and gentlemen,

It is my great pleasure to be here today to share with you the Government's environmental policy initiatives especially with respect to the new initiatives recently announced in this year's Policy Address.

Introduction

Environmental protection and economic development have often been regarded as competing alternatives which are mutually exclusive. However, the emergence of the concept of sustainable development in the past 15 years or so has changed this attitude. Sustainable development calls for significant changes in our patterns of development, production, consumption and behaviour. It recognizes needs and limitations, and seeks to achieve a win-win solution of a healthy environment, social equity and vital economy. In line with this long term goal, our on-going and new initiatives are developed with the emphasis on pollution prevention and resource conservation. In achieving these initiatives, we would need the support of the public and the co-operation and active participation of the business sector.

Improving Air Quality

Let me start with the issue of air quality since it is one of the most visible problems that have caused much concern among the public and the business community. To reduce emissions from vehicles, we have introduced a series of measures. We have implemented incentive schemes to encourage the early replacement of diesel taxis and diesel light buses with liquefied petroleum gas (LPG) vehicles. As a result, virtually all taxis (over 99.8%) have now switched to LPG. As for light buses, nearly 80% of newly registered public light buses (PLBs) are LPG ones and about one-third of Hong Kong's PLB fleet are fuelled by LPG. To further improve air quality at the street level, we have introduced ultra low sulphur diesel, which is 86% less polluting than Euro III diesel; we completed an incentive programme to install particulate reduction devices on pre-Euro light diesel vehicles and made the installation mandatory. Furthermore, we have completed a similar installation programme for pre-Euro heavy diesel vehicles and will make the devices mandatory for these vehicles.

These initiatives have proven to be effective. Compared with 1999, the number of smoky vehicles dropped by 80% in 2004. Respirable suspended particulates (RSPs) and nitrogen oxides (NOx) at roadside dropped by 9% and 24% respectively. To bring about further improvements, we have tightened the petrol standard to Euro IV with effect from January 2005. We will also require the installation of vapour recovery systems for vehicle refueling at petrol filling stations from 31 March 2005. Furthermore, we have started the preparatory work for introducing Euro IV emissions standards to newly registered vehicles by 2006.

With regard to stationary pollution sources, power plants are the dominant emission sources of sulphur dioxide (SO2), NOx and RSPs in Hong Kong. We will impose ceilings on the total emissions of the local power companies. We will make it a policy to require them to maximize the use of natural gas in power generation and develop renewable energy.

The air quality of Hong Kong is increasingly affected by regional air pollution as the Mainland economy continues to grow. To address the regional air pollution problem, we are working closely with Guangdong to reduce the total air pollutant emissions in the whole Pearl River Delta (PRD) region. For this purpose, the HKSARG and the Guangdong Provincial Government reached a consensus in 2002 to reduce by 2010, on a best endeavour basis, the emissions of SO2, NOx, RSPs and volatile organic compounds by 40%, 20%, 55% and 55% respectively, using 1997 as the base year. The two governments have already been implementing a Regional Air Quality Management Plan to achieve these reduction targets. We have also set up a regional monitoring network consisting of 16 monitoring stations covering the entire PRD region. These monitoring stations have been undergoing trials from January this year. We are working towards setting up a joint data centre and will publish the monitoring results as soon as possible.

Renewable energy

I mentioned the need to develop Renewable Energy (RE). We are working on this subject on two fronts: first, the feasibility and extent of production-scale RE generation in Hong Kong; and second, facilitating the implementation of small-scale RE systems on the user side. On the first front, wind energy and energy-from-waste are the only promising RE resources available to Hong Kong for production-scale implementation. Waste contains energy. In the course of finding solutions to our pressing solid waste problem, we will also try to extract energy from waste using environmentally sound technologies. Wind energy however requires a huge amount of space. Therefore large-scale application of wind energy will inevitably require a lot of trade-offs in land use, visual intrusion, countryside conservation, marine ecological protection etc. We hope that the pilot projects on the production-scale wind turbines being undertaken by the two power companies will give the public a first hand understanding of the benefits and constraints of wind energy so that the community as a whole can form an informed view on the role of wind energy in Hong Kong in future. HEC's wind turbine in Lamma Island is expected to be in operation in early 2006.

On the second front, many people may be interested in developing and installing small RE systems, such as photovoltaic panels, on their premises. The self-generated clean energy can be used to meet part of the power demand of the premises. For safety reasons, power company's approval is required to connect the RE systems to the main power grid. We are working with the power companies, academic institutes and professional bodies to devise a set of safety guidelines on grid connection by small RE systems. We hope that the guidelines which will be available soon will help smoothen and speed up the approval process. At the same time, the Government will continue to take the lead in using RE systems in Government projects. We will share the technical data and experience with interested parties to facilitate their design and installation work.

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Turning to the issue of wastewater, we will adhere to the "polluter-pays" principle. We will press ahead with the Harbour Area Treatment Scheme Stage 2 which will involve upgrading of the preliminary treatment works at the northern and western parts of Hong Kong Island, the construction of deep tunnel system to convey the currently untreated sewage from Hong Kong Island to Stonecutters Island, the expansion of the existing chemical treatment facilities at the Stonecutters Island Sewage Treatment Works (SCISTW) and the provision of new disinfection facilities. In order to meet the very challenging target completion date of 2013, the unanimous support and concerted effort of all stakeholders, both within and outside the Government are essential. We also need to review the present sewage services charging scheme to uphold the "polluter-pays" principle with a view to reducing the increasing subsidy to be borne by taxpayers for sewage services due to the commissioning of new sewerage facilities and achieving an equitable sharing of the funding responsibility.

Waste Management

Hong Kong is facing a critical waste problem. Since the implementation of the Waste Reduction Framework Plan, the overall recovery rate of municipal solid waste (MSW) has increased steadily from 31% in 1999 to about 40% in 2004. Despite these achievements, large quantities of waste are still produced. In 2004, about 6.4 million tones of waste were disposed of in our three strategic landfills which are expected to be filled to their capacity in six to ten years. It is evident that our problem cannot be eliminated through end-of-pipe treatment. Our waste management strategy should aim to reduce, reuse, and recycle waste.

We will issue a strategy document in the form of a White Paper to set out the whole strategy on municipal waste management so that the community will have a better picture of how the imminent waste problem is to be tackled. We aim to publish the White Paper in summer this year.

An integral part of our waste management strategy to reduce waste is to continue to implement the "polluter pays" principle. As a first step, we will introduce a charging scheme for construction waste. The enabling legislation and the two sets of subsidiary legislation have already been enacted. We aim to implement the charging scheme in the summer of 2005. In the long term, the same principle will be applied to municipal solid waste.

We will also study the feasibility of introducing Product Responsibility Schemes (PRS) through legislation to enhance recovery, reuse and recycling of wastes. We are conducting Regulatory Impact Assessment (RIA) Studies on tyres, rechargeable batteries, beverage containers, and electrical and electronic appliances. We will consult the public on the various regulatory options of a mandatory PRS on tyres this year.

To successfully reduce waste, we need the co-operation of all members of the public. The Government has all along encouraged the public to participate in waste recovery and reduction. Promoting separation of domestic waste at source is a major focus this year. We are encouraging and assisting property management companies to provide waste

separation facilities on each building floor to make it more convenient for residents to separate domestic waste at source.

While waste reduction and recovery will continue to be our top priority, there would still be large volumes of waste (4 million tons a year) that cannot be recycled and need to be properly disposed of. Maintaining the current manner of disposing of waste without treatment at landfills and using landfill as the only waste management method is clearly not sustainable. There is a need to establish Integrated Waste Management Facilities (IWMF) that would embody waste recovery and recycling, and waste treatment at the same location for more efficient and sustainable waste management. In late 2002, we invited Expressions of Interest from local and overseas operators on waste treatment options. A total of 59 proposals were received. Six major technology types were proposed, including composting, anaerobic digestion, incineration, gasification, a combination of mechanical and biological treatment (MBT), and combustion of fuel derived from waste for the production of cement. We have set up an advisory group comprising non-government officials to advise on the most suitable technology option for the IWMF. We will consult the public later this year on the technology options to be adopted in Hong Kong.

Owing to a general decline in the number of local reclamation projects, the generation of inert construction and demolition materials has far exceeded demand in recent years. In March 2004, we signed a co-operation agreement with the State Oceanic Administration to provide a framework for the use of the inert construction and demolition materials in the Mainland. We are now actively discussing with the Mainland authority on the implementation details with a view to starting export of the materials to the Mainland for reuse this year.

To turn waste into resources, we will promote the development of the recycling industry. We have been supporting the recycling industry by granting land in the form of short term tenancies since 1998. To further promote the growth of the industry, we have identified a 20-hectare industrial site in Tuen Mun with a waterfront for development into an EcoPark for exclusive use of the recycling industry. The provision of longer-term land in the EcoPark will encourage the environmental industry to invest in their business.

To enhance the competitiveness of recycled products, Government has tried to set an example by taking the lead in using green products. In 2002, we drew up the environmentally responsible product specifications for 37 products for Government procurement. We will develop environmental specifications for more products and pursue a more vigorous green procurement policy. We will continue to explore the use of recycled materials in government projects to encourage priority use of recycled materials to enhance their marketability.

In relation to green products, the Electrical and Mechanical Services Department introduced the voluntary energy efficiency labeling schemes in 1995. The scheme now covers sixteen household appliances and office equipment. The energy labels provide energy consumption information of the relevant products in a user-friendly way. With a well established assessment mechanism, we believe that it is the right time now to convert the voluntary scheme into a mandatory one by requiring *all* models of *selected* household appliances and office equipment to apply for and display energy labels. We believe that by enabling customers to make informed choices, we can accelerate the phasing out the less

energy-efficient models from the market and encourage the trade to bring more energy-efficient ones to Hong Kong. We expect the community to welcome this initiative.

On the other hand, we also recognize that there may be practical issues that we need to address in order to minimize the inconvenience brought to the trade. We will consult the public and the trade on the implementation details in a few months.

Nature Conservation

One of the key objectives of our environmental initiatives is to protect and conserve our natural environment and ecologically important habitats. In this regard, we have introduced a new nature conservation policy together with an implementation programme. The new policy aims to better achieve the nature conservation objectives, in particular to enhance the conservation of ecologically important sites which are in private ownership. We have set up a scoring system for assessing the relative ecological importance of different areas and drawn up a list of 12 priority sites for conservation. We are hoping to implement pilot schemes under two new management initiatives. Meanwhile, the existing nature conservation measures will continue and will be enhanced where appropriate.

Stockholm Convention

We also need to fulfill our international obligations. Persistent organic pollutants, or more commonly known as POPs, possess toxic properties. They resist degradation and often take tens or even hundreds of years to degrade. They can be transported across international boundaries through air, water, migratory species and the food chain. The international community is therefore very concerned about the threat of POPs to the environment and human health. Twelve POPs are now under the surveillance of the Stockholm Convention on Persistent Organic Pollutants, which is applicable to Hong Kong. We need to submit an implementation plan to the United Nations in 2006. We are now identifying the possible sources of POPs in Hong Kong and their emission levels. Depending on the findings, we may introduce new regulatory and monitoring measures. From the data we have collected so far, the level of POPs in Hong Kong is not a cause for concern. Nevertheless, we will continue to keep a close watch on the situation. As most POPs are obsolete pesticides that are no longer used in Hong Kong and in our major trading partners, the implementation of the Stockholm Convention in Hong Kong should have little impact on our trade.

The above is a brief account of our work and new initiatives. I am more than happy to hear your views and suggestions how we can work with the private sector to achieve the goal of protecting and enhancing our environment.

Thank you.