

**First Sustainable Development (SD) Strategy for Hong Kong
Second Annual Implementation Progress Report (May 2007)**

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<p>A. <u>Strategic Objectives</u></p> <p>(1) As a community, to make every effort to avoid generating waste and to reduce the amount of solid waste that needs final disposal, by adopting measures to facilitate the separation of discarded material, the recovery and reuse of material and the recycling of non-reusable material.</p> <p>(2) To apply the “user pays” principle as a means of reducing volumes of waste for disposal.</p> <p>(3) To adopt advanced technologies and practices to treat waste requiring final disposal and to create new economic opportunities.</p> <p>In the near future, we will publish a White Paper to set out the strategy for the management of municipal solid waste.</p>	<p>(a) The Environmental Protection Department (EPD) published “A Policy Framework for the Management of Municipal Solid Waste (MSW) (Policy Framework)”, which sets out a comprehensive strategy with clear targets and timetables for MSW management in Hong Kong for the ten years from 2005 to 2014.</p> <p>(b) The Policy Framework embraces the fundamentals of sustainable waste management strategy, the “user pays” and “producer responsibility” principles and proposes tools and measures to create economic incentives to avoid, reduce, reuse and recycle waste. It also proposes to develop state-of-the-art Integrated Waste Management Facilities (IWMF) with thermal treatment as the core technology for final waste treatment before disposed at our landfills.</p>

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<p data-bbox="178 300 336 332">B. <u>Targets</u></p> <p data-bbox="231 373 1008 446">We will review the targets recommended by the Council for SD, namely –</p> <ol data-bbox="231 487 1008 820" style="list-style-type: none"> <li data-bbox="231 487 1008 592">(1) To reduce the amount of municipal solid waste generated in Hong Kong by 1% per annum up to the year 2014, based on 2003 levels. <li data-bbox="231 633 1008 706">(2) To increase the recovery rate of municipal solid waste to 45% by 2009 and 50% by 2014. <li data-bbox="231 747 1008 820">(3) To reduce the total municipal solid waste disposed of in landfills to less than 25% by 2014. 	<ol data-bbox="1050 373 1890 1274" style="list-style-type: none"> <li data-bbox="1050 373 1890 446">(a) The EPD has fully adopted the targets recommended by the Council for SD and included them in the Policy Framework. <li data-bbox="1050 462 1890 755">(b) Compared to the previous year, the amount of MSW disposed of at our landfills dropped by 1% (or 36,000 tonnes) against an economic growth of 6.8% in 2006. There was an impressive increase in the recovery rate of domestic waste from 16% to 20% in only one year’s time. With the increase in domestic waste recovery, the overall recovery of MSW also increased from 43% in 2005 to 45% in 2006, three years ahead of the target. <li data-bbox="1050 771 1890 1104">(c) Yet, despite efforts in waste reduction, the amount of MSW generated remains on an increasing trend, which is likely to be the result of robust growth in commercial, industrial and tourism-related activities in 2006, which resulted in about 4% increase in commercial and industrial waste generation. Moreover, while the amount of MSW landfilled was reduced by 1% in 2006, there is still a long way to go in achieving the Policy Framework’s target of reducing the total MSW landfilled to less than 25%. <li data-bbox="1050 1120 1890 1274">(d) EPD will press ahead with the policy initiatives in the Policy Framework, in particular MSW charging, producer responsibility schemes (PRSs), EcoPark and IWMF in order to fully achieve the waste management targets.

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<p>C. <u>Plan of Action</u></p> <p>(1) To embark on educational programmes to reduce waste generation.</p>	<p>(a) The EPD, together with the Environmental Campaign Committee, will continue to organize community-based and school-based waste reduction activities and to publicize waste reduction messages through the mass media. As an on-going measure, general awareness of waste reduction is promoted through the local media, including television, radio stations and local newspapers, as well as production of APIs (Announcements of Public Interest).</p> <p>(b) The Environment and Conservation Fund has agreed to allocate \$10 million for a public education programme under the Policy Framework for the Management of Municipal Solid Waste (2005-2014). The programme aims to support longer-term and community-wide public education projects, which are in line with the objectives of the Policy Framework.</p>
<p>(2) To introduce community programmes to encourage territory-wide separation of waste at source and introduce measures to facilitate household participation.</p>	<p>(a) As at March 2007, EPD has enlisted 562 housing estates in the territory-wide programme on source separation of domestic waste, covering about 32% of the population in Hong Kong. The medium term aim is to enlist 80% of the population by the end of 2010 and to extend the programme to all public rental housing estates by 2012.</p> <p>(b) Apart from funding support through the Environment and Conservation Fund (ECF) to help property management companies to install source separation bins at the housing estates, EPD has, through liaising with the Buildings</p>

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	<p>Department and Fire Services Department, published a Guidebook to facilitate household participation in source separation in mid 2006.</p>
<p>(3) To step up implementation of the polluter-pays principle through the introduction of fiscal measures such as product responsibility schemes and green tax.</p>	<p>(a) EPD is developing the PRS on plastic shopping bags, vehicle tyres and electronic and electrical equipment, in consultation with the relevant trade.</p> <p>(b) Regarding the PRS on plastic shopping bags that involves an environmental levy, EPD has completed a consultancy study and will put forward a specific proposal shortly.</p> <p>(c) Before the levy kicks in, EPD is working with the retail sector to reduce the use of plastic shopping bags on a voluntary basis. Ten major retail chains have respectively entered into a “Voluntary Agreement on Plastic Bag Reduction” with EPD and pledged to reduce 120 million plastic shopping bags in a year. So far, these retail chains have reported reduction of some 130 million, over-achieving their targets. In parallel, EPD also supports the “No Plastic Bag Day” campaign, which involved a voluntary donation on plastic shopping bags distributed on specific dates.</p> <p>(d) A Rechargeable Battery Recycling Programme, funded by 36 manufacturers and importers of rechargeable batteries and electronic equipment, moved into its third year in April 2007. Collection points are set up in more than 880 housing estates covering 56% of the population, some 220 commercial/industrial buildings and about 170 schools. About 40 tonnes of rechargeable batteries (equivalent to</p>

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	<p>600,000 pieces) have been collected, of which 26 tonnes have already been shipped to a designated treatment facility in South Korea for recycling.</p>
<p>(4) To develop a policy to promote the recycling industry.</p>	<p>EPD has been formulating a comprehensive policy to support the recycling industry. Specifically EPD will:</p> <ul style="list-style-type: none"> (a) improve the waste collection network through programmes on separation of waste at source; (b) adopt producer responsibility schemes as a major measure to enhance the recovery of recyclable materials as reported in item 3 above; (c) continue to lease suitable short term tenancy sites exclusively to waste recyclers. So far, a total of 36 sites have been let; (d) establish an EcoPark to provide long-term land for the environmental and recycling business (see the Implementation Progress to Plan of Action Item (5) below); (e) adopt a green procurement policy to enhance market demand for recycled products; (f) continue to support and encourage research and development of new recycling technologies through the ECF, the Innovation and Technology Fund and various funds for small and medium enterprises; and (g) continue to organize educational programmes at the community level to increase the public awareness of waste recycling.

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<p>(5) To establish an EcoPark exclusively for the environmental industry.</p>	<p>(a) The EcoPark occupies 20 hectares of land in Tuen Mun Area 38 and will be developed in two phases. There will be a 460-metre long marine frontage in EcoPark for bulk sea transport.</p> <p>(b) Construction of EcoPark Phase 1 commenced in July 2006, with the first batch of land made available for leasing in December 2006. The whole of Phase 1 will be completed in 2007, while Phase 2 will be commissioned in 2009.</p> <p>(c) Tenders were invited in December 2006 for the first batch of Phase 1 tenancies, which will be awarded in the first half of 2007. The second batch of tenancies will also be tendered and awarded within 2007.</p>
<p>(6) To examine the introduction of charges for municipal solid waste.</p>	<p>(a) EPD completed a 3-month trial scheme in 20 housing estates with different settings including public rental estates, subsidized sales flats, private housing estates and government quarters.</p> <p>(b) EPD identified a number of important issues during the trial, such as the provision for necessary logistical support, enforcement measures, physical constraints in singleton buildings, mode of charging, etc. EPD will examine these issues in further details to develop practicable options for the charging scheme.</p> <p>(c) In view of the territory-wide implication of such a scheme, EPD will consult the public on practicable options before we introduce the relevant legislation into the LegCo.</p>

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<p>(7) To consult the public on the introduction of advanced technologies for the bulk treatment of solid waste.</p>	<p>(a) EPD has commenced an exercise to identify suitable sites for developing the IWMPF, taking into account environmental, technical/engineering and economic considerations, as well as social impact and implications to consumers/users. This will be followed by detailed feasibility and EIA studies.</p> <p>(b) EPD plans to organise a seminar in 2007 to present the need for the IWMPF, to introduce the latest waste treatment technologies, to share with both local and overseas experts their experience and knowledge on the environmental, health and safety concerns, and how these concerns could be addressed through technological solutions and suitable measures.</p>

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<p>A. <u>Strategic Objectives</u></p> <ol style="list-style-type: none"> (1) To explain clearly the issue of Renewable Energy (RE) to the wider community, putting this in the context of local and global sustainable development, by organising regular promotional and educational campaigns. (2) To have an energy policy that is sustainable in the longer term, and that will set clear goals for the increased use of RE in Hong Kong and promote energy efficiency and conservation. (3) To increase and sustain conservation of energy in order to reduce the growing trend of energy use. 	<p>To promote renewable energy in the community, the Environmental Protection Department (EPD), the Economic Development and Labour Bureau (EDLB) and the Electrical and Mechanical Services Department (EMSD) have been implementing various measures, including cooperation with the two power companies, green groups and other non-governmental organizations in launching public education and publicity programmes, encouraging the use of renewable energy in government buildings as well as the private sector, and working with the power companies to promote the use of renewable energy in power generation. Details are set out below.</p>
<p>B. <u>Targets</u></p> <ol style="list-style-type: none"> (1) To organise more public education programmes on RE and sustainable energy consumption that links these issues to local and global sustainable development. 	<p>Details are set out below.</p>

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<p>(2) To aim to have between 1% and 2% of Hong Kong's total electricity supply met by power generated from renewable sources by the year 2012, with this target being subject to regular review in the light of advances in technological solutions and emerging sustainability considerations.</p> <p>(3) To develop plans to promote energy efficiency and conservation as part of a sustainable energy policy.</p>	
<p>C. <u>Plan of Action</u></p> <p>(1) To work with the power companies and other stakeholders to organise more education campaigns on RE.</p>	<p>(a) The EMSD, EPD and EDLB have regular meetings with the two power companies on ways to promote energy efficiency and renewable energy.</p> <p>(b) Hongkong Electric (HEC)'s 800 kW demonstration wind turbine at Lamma Island commenced operation in February 2006 and CLP Power (CLP) has already completed their Environmental Impact Assessment (EIA) for the construction of a wind turbine at Hei Ling Chau. CLP's EIA report states that the indicative date for the operation of the wind turbine is in 2008 (http://www.epd.gov.hk/eia/register/report/eiareport/eia_1242006/html/index.htm). The two power companies are conducting EIA studies for building off-shore commercial wind farms in Hong Kong waters.</p> <p>(c) On-going education initiatives include -</p> <p>i) a web-based educational kit for secondary school students on energy efficiency produced by the two</p>

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	<p>power companies in collaboration with Education and Manpower Bureau (EMB) and EMSD. Briefings are organized for secondary school teachers to introduce the educational kit (http://www.hk-phy.org/energy/index_e.html) ;</p> <p>ii) sponsorship schemes launched by power companies to promote use of renewable energy or energy efficiency and conservation. CLP's Energy Innovation Fund (https://www.clpgroup.com/SocNEnv/Env/EnvEdu/CLFund/Pages/default.aspx) and HEC's Clean Energy Fund (http://www.hec.com.hk/hehWeb/CommunityAndEducation/CleanEnergyFund/Index_en.htm) each earmarked about \$1M in 2006 for implementing projects related to renewable energy or energy efficiency and conservation;</p> <p>iii) the Education Path at the EMSD Headquarters, which consists of Exhibition Galleries with interactive exhibits and a viewing gallery where a 350kW PV facility and two wind turbines (1kW and 1.5kW). It provides schools and other interested organizations with the latest technologies in renewable energy and energy efficiency (http://www.emsd.gov.hk/emsd/eng/pee/ep.shtml);</p> <p>iv) EMSD's technical forums for stakeholders (including real estate developers, Housing Authority, members of professional institutions) and support rendered to non-governmental organizations in organizing</p>

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	<p>education and publicity activities; and</p> <p>v) the Internet Platform on Renewable Energy launched in March 2007. It provides useful technical and non-technical information to the public, in particular those planning to install renewable energy systems in Hong Kong (http://re.emsd.gov.hk/).</p>
<p>(2) To establish by 2006 a policy on the installation of RE facilities as part of new government buildings and major public sector projects.</p>	<p>The Government issued a circular on “Adoption of Energy Efficient Features and Renewable Energy Technologies in Government Projects and Installations” in 2005. The circular requires all works departments to apply energy efficient features and renewable energy technologies in government projects and installations where feasible, and requires works departments to regularly report progress (http://www.devb-wb.gov.hk/UtilManager/tc/C-2005-16-0-1.pdf).</p>
<p>(3) To work with the power companies on arrangements for simplifying procedures for RE suppliers to gain access to the existing electricity grid, with the aim of having appropriate procedures in place in the post 2008 electricity market, and to encourage them to use RE sources for power generation.</p>	<p>(a) The Government’s Technical Guidelines on Grid Connection of Small Scale Renewable Power Systems provide guidance on technical aspects of connecting renewable energy systems of capacity up to 200 kW to the electricity grid (http://re.emsd.gov.hk/english/gen/grid/grid_tech.html).</p> <p>On the other hand, CLP’s information leaflet “Renewable energy systems and CLP’s electricity grid”, provides information on the application procedure for connection by small renewable energy systems to their grid.</p> <p>(b) The Scheme of Control Agreements between the Government and the two power companies will expire in</p>

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	<p>2008. In the Stage II Consultation Paper on the Future Development of the Electricity Market in Hong Kong (http://www.info.gov.hk/archive/consult/2006/stageII_cp_e.pdf), the Government has proposed to implement the following measures:</p> <ul style="list-style-type: none">(i) to institute a standard arrangement for renewable energy users to connect to the grid for backup supply; and to seek the agreement of the power companies to extend the arrangement to cover renewable energy systems with capacities above 200kW and to waive the nominal administrative fees for grid connection by renewable energy users;(ii) to give a higher rate of return for renewable energy infrastructure than all other assets so as to provide financial incentives to the power companies;(iii) to provide “bonus” return to the power companies if they achieve the target for using renewable energy;(iv) to seek the agreement of the power companies to provide connection/access to their grids for generating facilities employing renewable energy, and to facilitate these facilities to connect and feed electricity to their grids; and(v) to have grid connection/access for renewable energy users/generating facilities using renewable energy negotiated between the prospective grid user and the respective power company, and the Government will assist where necessary and when

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	requested by either party, including assisting in arriving at mutually agreed access charges.
<p>(4) To draw up by 2007 a sustainable energy policy that has regard to measures aimed at promoting the use of RE and encouraging energy efficiency and conservation.</p>	<p>(a) The Government has proposed in the Stage II Consultation Paper (http://www.info.gov.hk/archive/consult/2006/stageII_cp_e.pdf) various measures to promote energy efficiency and conservation as well as the use of renewable energy. The Government will take into account its targets of promoting the use of renewable energy and encouraging energy efficiency and conservation as well as the public's views when preparing the new Scheme of Control Agreements with the power companies.</p> <p>(b) As an on-going measure, the Government has been promoting energy efficiency and conservation. For example, EMSD has developed energy efficiency guidelines, including the "Guidelines on Performance-based Building Energy Code" (http://www.emsd.gov.hk/emsd/eng/pee/eersb_pub.shtml) and the "Guidelines on Energy Audit" (http://www.emsd.gov.hk/emsd/eng/pee/em.shtml), to promote energy conservation in commercial properties. It has also launched the "Hong Kong Energy Efficiency Registration Scheme for Buildings" (http://www.emsd.gov.hk/emsd/eng/pee/eersb.shtml) under which certificates are issued to buildings that meet the standards, so as to encourage local buildings to implement various energy conservation measures. To further encourage the use of energy efficient products, the</p>

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	<p>Government proposes to introduce a mandatory Energy Efficiency Labelling Scheme by way of legislation. The Energy Efficiency (Labelling of Products) Bill was tabled to the Legislative Council for first reading and commencement of second reading debate on 18 April 2007 (http://www.legco.gov.hk/yr06-07/english/bills/brief/b22_brf.pdf).</p>

III. Urban Living Space

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A. <u>Strategic Objectives</u>	
<p>(1) To speed up improvements to the environment of older urban areas through a “people-oriented” approach and the flexible deployment of the “4R” strategy – redevelopment, rehabilitation, preservation and revitalisation.</p>	<p>(a) The Urban Renewal Authority (URA) will endeavour to forge ahead with its urban renewal programme through a “people-oriented” approach.</p>
<p>(2) To plan and further develop the New Territories, taking account of stakeholder concerns on sustainability issues such as the need to protect the natural environment and cultural characteristics of rural areas, while having regard to Hong Kong’s long-term socio-economic needs.</p>	<p>(b) This strategic objective has been taken on board in the HK2030 Study (http://www.pland.gov.hk/p_study/comp_s/hk2030/) conducted by the Planning Department (PlanD).</p>
<p>(3) To promote sustainable urban planning and design practices that will ensure that Hong Kong will be an attractive and enjoyable place in which to live and work.</p>	<p>(c) This objective is achieved through the continuous application of sustainable urban design guidelines set out in the Hong Kong Planning Standards and Guidelines (HKPSG) (http://www.pland.gov.hk/tech_doc/hkpsg/index_e.html) in planning studies, plan making and development control process.</p>
B. <u>Targets</u>	
<p>(1) To regenerate older urban districts by taking full account of the need for economic viability whilst emphasizing the importance of open space</p>	<p>(a) The URA will continue to work towards the targets under its “4R’ urban renewal strategy.</p>

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provision and retaining local socio-cultural characteristics and heritage buildings.	
(2) To clarify the relative social, economic and environmental considerations that would need to be addressed in further developing the New Territories, so that stakeholders can regularly give informed views on the merits of development options.	(b) We have established under the HK2030 Study a study process which aims to formulate a planning strategy that helps to bring about long-term sustainability for Hong Kong. This has been done through extensive public consultation exercises, as well as a three-step evaluation process which has taken into full account social, economic and environmental considerations. During Stage 3 of the study, we have presented different options for development, including options for further developing the New Territories. We have also drawn the public's attention to the merits and demerits of the different development options.
(3) To maintain and to review on a regular basis guidelines governing sustainable urban planning and design, with special regard to issues such as buildings affecting view corridors or restricting air flow and the need to proceed in a manner consistent with the overall sustainable development strategy for Hong Kong.	(c) Sustainable urban design guidelines in HKPSG to improve outdoor air ventilation were published for public reference in 2006. A HPLB/ETWB Technical Circular on Air Ventilation Assessment (AVA) No. 1/06 (http://www.devb-plb.gov.hk/eng/circulars/pdf/hplb-etwb-tc-01-06.pdf) was issued in 2006 to set out guidelines and procedures for government project proponents to apply AVA in planning and design of government project.
C. <u>Plan of Action</u>	
(1) To consult stakeholders on guidelines for revitalisation and redevelopment of older urban	(a) Since its establishment in 2001, the URA has been guided by the Urban Renewal Authority Ordinance to gradually

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<p>areas for inclusion in the Urban Renewal Strategy by 2006, and to publicise the document widely.</p>	<p>roll out its holistic “4R” programme on urban renewal. A redevelopment project which involves an interactive and consultative planning process, property acquisition, rehousing and land resumption normally takes several years to complete. As the URA has accorded priority to the former Land Development Corporation projects, redevelopment projects under the new legal framework have only recently been commenced. Besides, the URA’s building rehabilitation programme, which provides technical and financial assistance to eligible owners to undertake building maintenance, has been launched only for a relatively short period. Having carefully considered the issue, we have informed the Legislative Council that the URA should be allowed more time to accumulate adequate operational experience to enable us to fully understand the implementation aspects and effects of the URA’s urban renewal programme and carry out the Urban Renewal Strategy review effectively.</p> <p>(b) When we conduct the review, we will consult different sectors of the community with a view to ensuring that our urban renewal efforts will better meet the community’s aspirations.</p>
<p>(2) In the context of the “HK 2030” study, to explain clearly the sustainability implications for further development of the New Territories, with a view to having a framework for sustainable detailed</p>	<p>(a) The three-step evaluation framework developed for the HK2030 Study has helped to ensure that social, economic and environmental considerations as well as public views have been given due regard throughout the study process.</p>

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<p>planning through stakeholder consultation in place by 2006.</p>	<p>The HK2030 Study is now near completion and final report is being prepared. The final report, together with relevant papers (including the Strategic Environmental Assessment Report and Report on Sustainability Assessment), will be released to the public upon its completion.</p>
<p>(3) To continue to implement and keep under review the current guidelines on sustainable urban design.</p>	<p>(a) This is a continuous and on-going process. Sustainable urban design guidelines to improve quality of outdoor living environment in HKPSG were updated in 2006 for public reference.</p>
<p>(4) Having regard to the effectiveness of measures to promote sustainable building design features, to consider further enhancing sustainable building design guidelines, with a view to drawing up recommendations for improvement, including an assessment of the implications of setting mandatory requirements in this area by 2007.</p>	<p>(a) Buildings Department has commissioned a consultancy study to explore measures to promote building design features that support sustainable urban living space. We aim to complete the study before end 2007. The concerned bureaux and departments shall carefully consider the recommendations of the study and the way forward.</p>