

Sustainable Development of Recycling Industry – New Challenges, New Measures, New Opportunities

**Waste Reduction & Recycling Division
Environmental Protection Department**

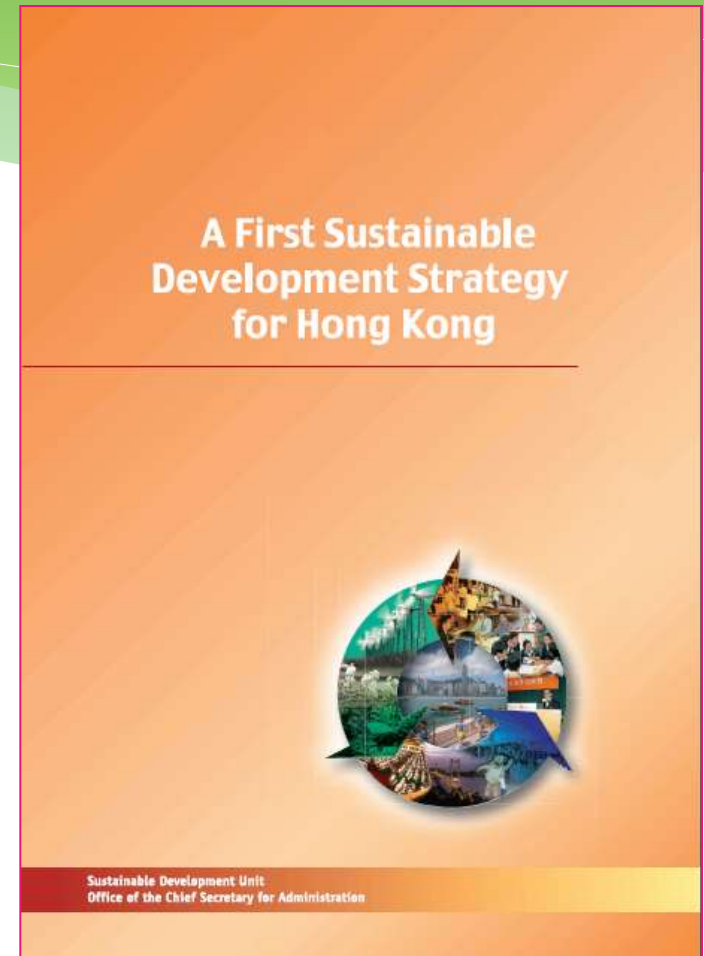
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28 November 2014

HK's Sustainable Development Strategy

In the “First Sustainable Development Strategy for Hong Kong”, three main focused areas for HK's sustainability have been identified :

1. **Solid Waste Management;**
2. Renewable Energy; and
3. Urban Living Space.



Waste Management Challenge

* Target:

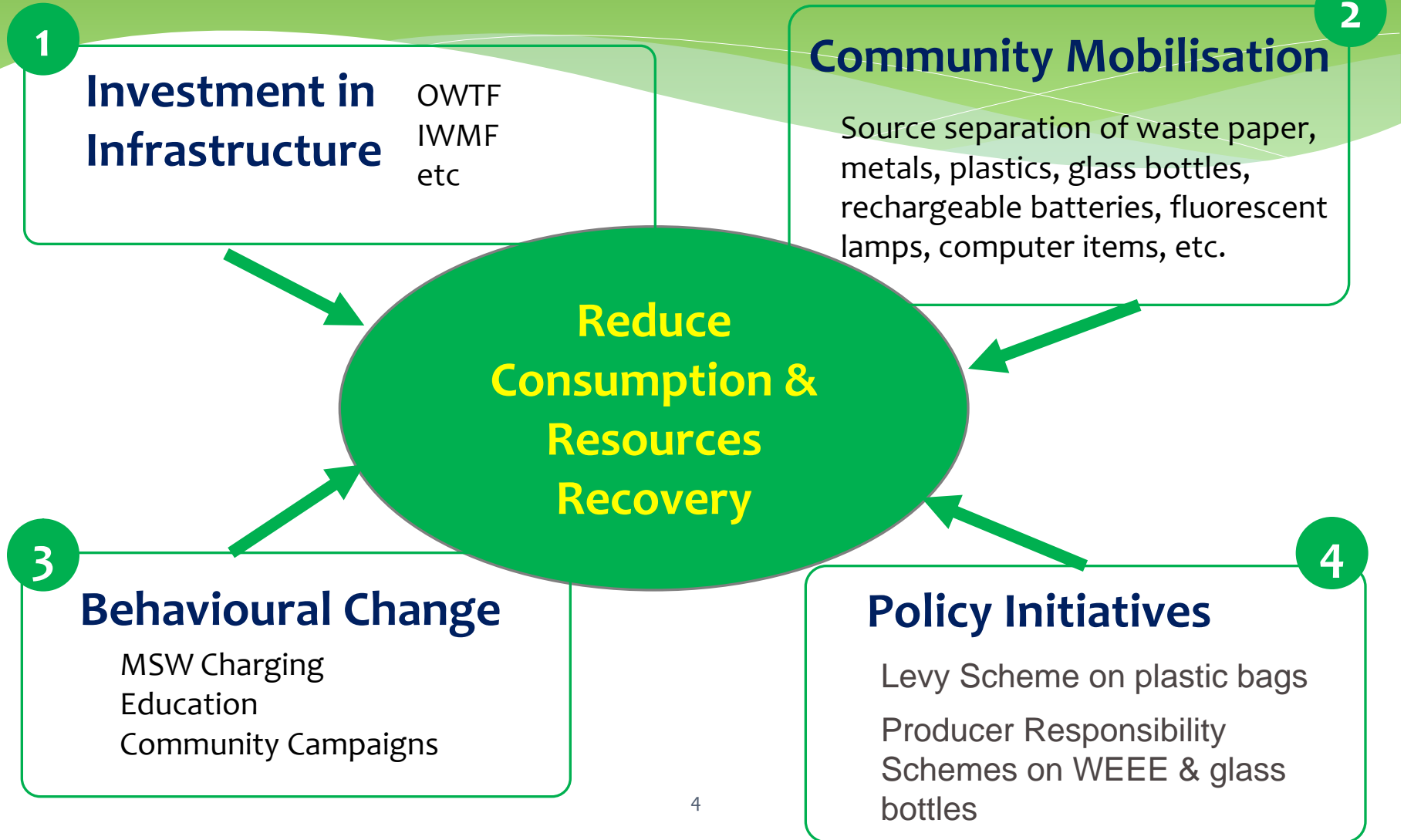
- * To reduce the current per capita MSW disposal rate of 1.27 kg per day to **0.8kg per day** by 2022
- * To reduce MSW by **40%** by 2022



Hong Kong: Blueprint for Sustainable Use of Resources 2013-2022

- * Drive behavioural change through policies and incentives
- * Mobilize the community through targeted campaigns
- * Invest in Infrastructure e.g. OWTFs

Waste Management Strategy and Recycling



The Waste to Resources (W to R) Policy

- * To help meet the target to reduce MSW by 40% by 2022; and
- * To help create an industry in which waste is viewed as a resource to be recovered and reused as far as possible.

The private sector should play a key role in order to make it **Sustainable** in the long term.

Challenges facing the Recycling Industry

- * Land scarcity and high land premium
- * Market Price Fluctuation
- * Low-end recycling operation
- * Lack of market demand for recycled product
- * High labour cost, including employees' compensation insurance
- * Contamination of recyclables by refuse, food residue
- * Low recyclable values with high transportation Cost

Sustainability of the Recycling Industry

- * Government Policy Support
- * Funding Support, public & private
- * Land and Infrastructure
- * Reliable Sources of Recyclables
- * Stable Markets
- * Knowledge and Skills of work force
- * Social and Environmental Responsibilities

Steering Committee to Promote the Sustainable Development of the Recycling Industry

- * Set up in Aug 2013 under the chairmanship of the Chief Secretary for Administration
- * To promote the sustainable development of the local recycling industry so as to increase waste reduction and recovery and reduce the waste disposal burden



Policies Support – Producer Responsibility Schemes (PRs)

Voluntary PRs

- * Rechargeable Battery Recycling Programme
- * Computer Recycling Programme
- * Fluorescent Lamp Recycling Programme
- * Glass Container Recycling Programme

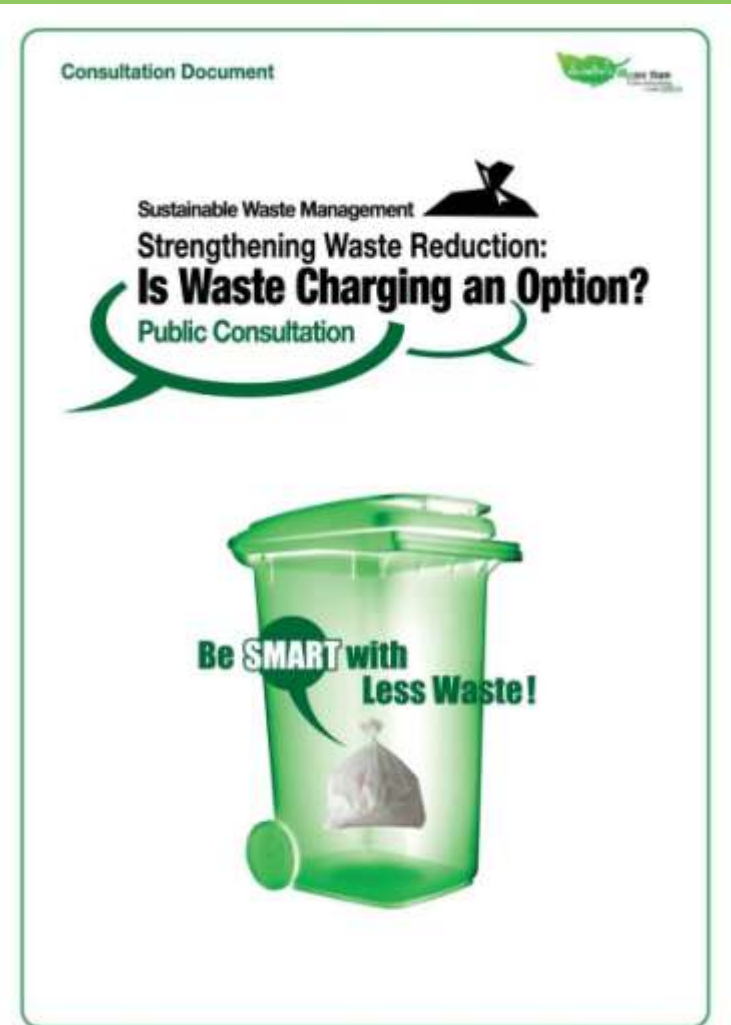
Mandatory PRs

- * Mandatory PRS on WEEE
- * Mandatory PRS on Glass Beverage Bottles



Policies Support – Municipal Solid Waste Charging

To create economic incentives to reduce waste as well as enhanced resources recovery



Funding Support - Recycling Fund

CE announced in 2014 Policy Address that \$1 billion had been earmarked for setting up a Recycling Fund

- Raise the operation standards and to promote the sustainable development of the recycling trade
- Promote markets for recycling products
- Enhance skills, capability and capacity thus facilitating sustainable development of the trade
 - Grants for individual recyclers
 - Grants for NPOs and professional/trade associations.



Other Funding Support

Innovation and Technology Fund (ITF)

- * Encourage and support investments in research and development of new recycling technologies, as well as commercialization of the products of these research and development projects.

Environment and Conservation Fund (ECF)

- * Subsidize community campaigns to promote recycling such as the provision of separation bins
- * Support waste recovery and recycling projects in school, housing estates and the community

Land /Infrastructure Support

Long-term Land - EcoPark

- * provide long-term land at affordable cost to the recycling industry
- * Occupying a total area of 20 hectares with a rental area of 14 hectares
- * Developed in 2 phases



EcoPark



Legend 圖例

- Phase 1 第一期
- Phase 2 第二期



- * 13 lots occupying 9.39 hectares have been leased to recycling industry
- * Processed more than 58,000 tonnes of recyclables in 2013 and ~ 57,000 tonnes of recyclables in the 1st half of 2014

Land / Infrastructure Support

Short-term Tenancy (STT) Sites

- * Provide exclusively to the recycling industry for their operation of recycling yards where recyclables are sorted, baled and processed at the STT sites.
- * STT sites occupying a total area of 4.7 hectares.
- * We are reviewing the provision of related tender arrangements for a longer tenure of up to 5-7 years



Land/ Infrastructure Support

Public Cargo Working Areas (PCWAs)

- * Most paper recyclers use PCWA berth places for exporting waste paper
- * We are considering to allocate suitable berthing places for exclusive use by paper recyclers to ensure stable provision of facilities
- * We aim to introduce the new arrangement in the next tendering exercise



Land / Infrastructure Support

- ◆ **EPD will commission a consultancy study to look into the land requirements of the recycling industry**
- To recommend on the land requirements for waste recycling in short, medium and long term
- To improve the land use efficiency of the waste recycling operations

Source Separation -

Source Separation of Waste (SSW) Programme



- * over 4,600 sets of recycle bins at public locations
- * about 2,000 housing estates (over 80% population) and 1000 C&I buildings joined the Source Separation of Waste (SSW) Programme with recycle bins/ facilities

Source Separation - Community Recycling Network



- ◆ Over 540 collection points (ECF/NGO centres, public housing estates, etc)
- Waste (Resources) - Exchange Incentives
- Educate public to participate in **clean and proper recycling**

Source Separation -

Educate public to participate in clean and proper recycling

多重用 少浪費 精明回收廢塑膠

可回收 ✓



(乾淨乾爽)

(乾淨乾爽)

(乾淨乾爽)



(乾淨乾爽)

(請先移除招紙)



(乾淨乾爽)

乾淨的乾貨包裝膠紙

(請先移除招紙)

(請先移除CD盒的封套/底招紙)

含金屬的塑膠玩具

(將不潔以物易物紀念品)

不可回收 ✗



受污染

醫療器具



難以拆成單一物料

有金屬內部的膠紙

水管 冷氣機雪種



其他

科學套

橡膠



Community Green Station (CGS)

- * CGS are to be set up in each of the 18 districts in HK to improve the recovery of resources on a local basis.
- * To support the community in the collection of low-value recyclables such as computers, electrical appliances, florescent tubes, glass bottles, plastics and rechargeable batteries.
- * To promote the concept of 'Recycle Clean' and the message of 'Use Less, Waste Less'
- * The first CGS will be located in Sha Tin.

Green Procurement

- * Stores and Procurement Regulations (SPR) encourages the purchase of environmental-friendly products
- * Public works to make use of recycled aggregates, recycled asphalt, particularly eco-concrete pavers with recycled glass for road maintenance contracts
- * Pilot schemes to use B5 diesel from used cooking oil in some Government vehicles, vessels and machinery
- * Encourage and promote commercial companies to participate in green procurement



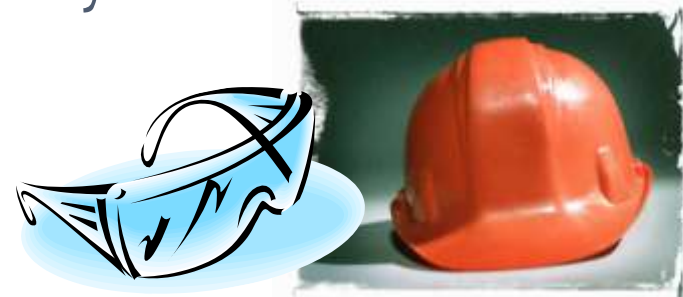
Green Procurement

- * Adoption of environment-friendly practices and supplies, including recycled materials
- * Total purchase value **HK\$ 1,040M** for 103 items in 2013
 - * Eco-paver with waste glass content – **HK\$ 70M** in 2013
 - * Bituminous materials with reclaimed asphalt pavement – **HK\$ 240M** in 2013
 - * B5 diesel with used cooking oil – **HK\$ 21M** in 2013
- * Green specifications developed for 146 procurement items (incl. 43 items added in 2013-14)

Safety and Training Development

Occupational Safety and Health (OSH) Star Enterprise Pilot Scheme

- * Develop Scheme with Occupational Safety and Health Council
- * Enhance the safety standards and awareness of work safety measures for recyclers
- * Provide safety training courses for practitioners in the recycling industry
- * subsidy for purchasing safety equipment
- * risk assessment and safety consultancy service



Registration Scheme

HKQAA has been play a key role in establishing and promoting standards of practice in the recycling industry

Hong Kong Cooking Oil Registration Scheme (HKCORS)

- * HKQAA held the kick-off ceremony in July 2014
- * enhance the identification and traceability of Waste Cooking Oil
- * reshape industry behavior
- * add value to their businesses by urging them to think green and act green
- * create a healthy and sustainable business ecosystem



Registration Scheme for other recyclables, such as plastics and glass

Efforts in Promoting the Sustainable Development of the Recycling Industry

Support Measures

Upgrade Operation Standard

Safety & Training

- * OSH Star Enterprise Pilot Scheme

Registration Schemes

- * **HKQAA**
- e.g. **HKCORS**

Financial Incentives

Land/ Infrastructure Support

- * STT sites
- * PCWAs
- * EcoPark
- * Land Study

Funding Support

- * Recycling Fund
- * ECF Fund
- * ITF

Policies Support

Policies/ Regulations

- * PRSs
- * MSW Charging

HK EPD :

(for the Recycling Industry)

To promote the sustainable development of the local recycling industry ...thereby optimising the overall environmental, economic and social benefits to Hong Kong.

To facilitate the upgrading of the recycling industry for sustainable development..... to raise the quantity and quality of local recyclables; to promote markets for recycled products; and to enhance the overall capability, capacity, efficiency and skills as well as market information, thus enhancing their competitiveness, and facilitating their sustainable development.

Extract from the Objective Statement
Recycling Fund

HKQAA:

To help industry and commerce in the development of quality, environmental, safety, hygiene and social management systems to assist industry and commerce to implement relevant systems so as to help improve our livelihood.

Extract from
the Mission Statement HKQAA

To promote professional practices, integrity, and social responsibility assist organisations to overcome challenges in all sorts of economic climates, so that they can enhance business performance and be more competitive.

Extract from the Chairman's Message, HKQAA
Ir Dr. Hon. Lo Wai Kwok, BBS, MH, JP

Thank you

<https://www.wastereduction.gov.hk>