

Waste Management: Sustainable Development through Partnership with Industry

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China – The World Factory

Over 70,000 HK-based factories in the PRD



Rapid economic development and
improved living standards?

GDP vs **Green environment**



Air pollution : acid rain

- Causes China a loss of RMB 110 bn/year, or 2-3 % GDP
- Acid rain appeared in 61.8% of cities in Southern China



How Industry can help?

- Working with government to develop and implement realistic and effective environmental policies
- Follow environmentally friendly practices in pursuing their operations



Working with government to develop
and implement realistic and effective
environmental policies

EcoPark



EcoPark

An EcoPark is the co-location of reuse, recycling, composting processing, and manufacturing in a central facility where wastes and recoverable materials are turned into usable materials and products



EcoPark

It involves a wide range of business activities including collection, sorting, and processing of industrial and biological materials; repair, refurbishing, or dismantling of equipment; and wholesale or retail sales.

EcoPark

Advantages to Businesses and Communities

- Reducing disposal costs
- Creating new revenues by reselling recycled products
- Opening new sources of materials and goods
- Creating business and job opportunities

EcoPark

Advantages to the Environment

- Reduction in demands on limited natural resources
- Reduction in demands on the capacity of the environment to accommodate solid waste and pollution, i.e. landfills

EcoPark

EcoPark in Hong Kong

- In 2003, there was over 17,700 tonnes of solid waste disposal per day
- Making up an aggregate of 6.5 million tonnes per year

To landfill or to recycle??

(figures from EPD)

EcoPark

EcoPark in Hong Kong

- It costs \$125 per tonne to build and operate landfills
- Some 7.7 million tonnes were landfilled in 2002
- The total capital and operating cost spent since the commissioning of the landfills was up to **\$9 billion**

(figures from EPD)

EcoPark

EcoPark in Hong Kong

- About 2.38 million tonnes of municipal solid waste were recovered in Hong Kong in 2003
- Of that total, **9% was recycled locally and 91% was exported** to the Mainland and other countries for recycling, with an export earning of more than HK\$2.5 billion for Hong Kong
- **Enormous business opportunities??**

(figures from EPD)

EcoPark

EcoPark in Hong Kong

Landfills filled up in 6 to 10 years??

→ Where should the waste go??

~~Dumping~~ → Recycling

EcoPark

EcoPark in Hong Kong

“An area of land set aside for use by the environmental industry within which individual tenants can acquire space suitable for their particular recycling and environmental operation at an affordable price”

EcoPark

EcoPark in Hong Kong

Target: Increase the local recycling rate
Partnerships among public sector, private sector and NGOs

EcoPark

EcoPark in Hong Kong

Public sector

- To formulate policies that encourage and facilitate recycling
- To provide the necessary infrastructure
- To introduce incentives to private sector to encourage active participation and long-term commitment

EcoPark

EcoPark in Hong Kong

Private sector

- To support through active participation
- To give professional advice from industry's perspective
- To adopt a **Green** procurement practice

EcoPark

EcoPark in Hong Kong

NGOs

- To form an **independent committee** representing service providers, users, professionals and industry to oversee the policy and operation of the EcoPark

Follow environmentally friendly practices in pursuing their operations

1-1-1 Programme Green Manufacturing Alliance



www.fhki.org.hk/TripleOne/fs_one.html

1-1-1 Objectives

- A **non-profit making** and **self-financing** project aiming to reduce and to roll back pollution that is affecting residents in Hong Kong and the PRD region
- To encourage 70,000+ HK based factories in HK & PRD to implement **at least one environmental project** each year



Organiser and Advisors

- **Organiser**
 - Federation of Hong Kong Industries (FHKI)
- **Project Advisors**
 - Business Environment Council (BEC)
 - Hong Kong Productivity Council (HKPC)
 - PRD Council



Technical Advisors

- BVQi
- Friends of the Earth (Hong Kong)
- Hong Kong Q-Mark Council
- Hong Kong Waste Management Association
- SGS Hong Kong Ltd



Supporting Organisations (as of Mar. 11, 05)

- Austrian Trade Commission
- British Consulate-General
- Consulate General of Japan
- Consul General of Germany
- Consulate General of Italy
- Hong Kong Environmental Industry Association
- HK & Kowloon Electrical Appliance Merchants Association
- HK Small & Medium General Association
- HK Plastic Machinery Association
- HK Sustainable Communications Association
- HK Watch Manufacturers Association
- Hong Kong Young Industrialists Council
- Institute of Industrial Engineers (HK)
- The Chinese General Chamber of Commerce
- The HK Exporters' Association
- The HK Chinese Enterprises Association



Three levels of recognition

- Level 1 – Green Participant
- Level 2 – Green Medalist
- Level 3 – Green Industrialist of the Year

Green Participant

- Entry level
- The factory proposes **at least one** environmental project for implementation

Green Medalist

- Upon successful and cumulative completion of **three or more** environmental projects
- Use of official **Green Medal logo** on its stationery, advertising and promotional materials for three years



Green Industrialist of the Year

- Selection of Best Environmental Projects from 7 categories
- Green Industrialist of the Year

Suggested environmental projects

- Energy Conservation
- Water Management
- Waste Discharge, Reduction & Treatment
- Recycling of resources
- Air Emissions
- Noise Abatement
- Green Management:
Product Eco-design, Cleaner Production, Green Procurement, Corporate Governance

Example of 1-1-1 project

Criteria of 1-1-1 project

- Realistic
- Specific
- Measurable
- Challenging
- Consistent with Organization Objectives
- Company wide effort

Example

- A project to reduce toxic gas emission from electroplating production line

Significance :

- Toxic Gas e.g. acid fume (pH 5.6) is emitted to atmosphere during electroplating process, causing acid rain, etc.

Example (Cont')

Target

- Install new facilities for the electroplating line
- Target to complete installation of new equipment by Oct 2005.
- To reduce the acid fume to pH level of 6.8

Example (Cont')

Project Milestones

- I) Evaluation of current design of plating bath and facilities (Apr 1-Apr 15, 05)
- II) Measure the air quality around plating bath area (Apr 1-Apr 30, 05)
- III) Employ consultant and contractors to provide effective solutions (Apr 20 – Jun 1, 05)
- IV) Install new improve equipment (Jun 1- Jul 15, 05)
- V) Re-evaluate and re-measure the performance of plating bath & surrounding air quality (Jul 15 – Aug 1, 05)

Why should industry participate?

- Receive Environmental Training
- Latest technology updates
- Good learning experience
- Technical assistance and professional assessment
- Increase Productivity and Competitiveness
- Customer loyalty
- Public recognition
- \$\$\$\$\$ savings

Official Launch on March 11, 05

Guest of Honor : Dr. Sarah Liao, Secretary of Environment, Transports and Works



Sustainable Industry Council (SIC)

- To provide directions for the 1-1-1 Programme
- To approve applications for Green Medal
- To elect winners of “Best Environment Practice” Award
- To elect “Green Industrialist of the Year”

SIC members

Co-Chairmen

Kenneth Ting, Chairman, Federation of Hong Kong Industries

The Hon Andrew Leung, Honorary President, Federation of Hong Kong Industries

Vice Chairman

Daniel M Cheng, Managing Director, Dunwell Enviro-Tech (Holdings) Ltd; Chairman, Environmental Industries group, Federation of Hong Kong Industries



SIC members (in alphabetical order)

- Gerald Campbell, Consul-General, Canada
- Dr John Chai, Managing Director, Fook Tin Technologies Ltd
- Robin Chiu, Director-General, FHKI
- Prof KC Lam, Chairman, Advisory Council on the Environment of the HKSARG
- Fred Lam, Executive Director, Hong Kong Trade Development Council
- Stanley CH Lau, Managing Director, Renley Watch Mfg Co Ltd; Deputy Chairman, Federation of Hong Kong Industries
- Joseph Lee, Chairman, Environmental Campaign Committee
- Raymond Lee, CEO, Lee & Man Paper Manufacturing Ltd; Vice Chairman, Environmental Industries group, Federation of Hong Kong Industries
- Edmund K H Leung, Member, Energy Advisory Committee; Town Planning Board
- Mei Ng, Director, Friends of the Earth (HK)
- Michael Tien, Chairman, KCRC & G2000
- Dr Jose Yu, President, the Chinese Manufacturer' Association of Hong Kong
- Zhang Guo-liang, Director, Wen Wei Po



1st SIC meeting, May 17, 05



Green Manufacturing Alliance

Mission

To facilitate the transformation of the Hong Kong manufacturing industry into "Green" and enhance its competitive advantages



Green Manufacturing Alliance

GMA was established in response to the recent regulatory threat from the European Union, namely the Directive 2002/95/EC on the Restriction of the Use of Certain Hazardous Substances in electrical and Electronic Equipment (**RoHS**) and the Directive 2002/96/EC on Waste Electrical and Electronic Equipment (**WEEE**)



Green Manufacturing Alliance

It aims to support industry in compliance with these requirements, and is in the process of launching an awareness programme consisting of a series of seminars and training sessions for industry operators' participation



Green Manufacturing Alliance

Founding Members

- Federation of Hong Kong Industries
- The Federation of Hong Kong Watch Trades & Industries Ltd.
- Hong Kong Electrical Appliances Manufacturers Association
- Hong Kong Electronics Industries Association
- Hong Kong Toys Council
- Hong Kong Watch and Clock Council
- Hong Kong Watch Manufacturers Association

Chairman

- Dr K B Chan, chairman, Automobile Components Group, FHKI chairman and MD, Surface Mount Technology (Hldgs) Ltd



GMA Press Conference, Feb 1, 05



Triple-Win situation

- generating new business opportunities
- boosting economic activities and creating more jobs
- improving the environment for ourselves and our future generations in a sustainable way



See our Websites:

FHKI Website: www.fhki.org.hk

1-1-1 Website: www.fhki.org.hk/TripleOne/fs_oneC.html

GMA Website: www.gmekh.net

Thank you!!

