

BEC EnviroSeries Conference

17 May 2019

## The Business of Waste - Solving Hong Kong's Urgent Environmental Problem

Conference Report

Published on 19 July 2019



## I. Introduction

Despite Hong Kong SAR Government (the Government)'s continuous effort, as well as the numerous business- and community-led waste reduction initiatives, Hong Kong's waste disposal rate has continued to grow over the last five years. It is increasingly vital and pressing to find solutions in the short term to reduce waste, and in the longer term to manage the use of resources in an environmentally sustainable manner. Among other stakeholders, the business sector plays a key part in waste avoidance and reduction at source, waste recovery and recycling downstream, and reprocessing and reusing to close the loop.

There were over 200 participants at the conference, including business leaders, policymakers, entrepreneurs, and experts, to discuss issues, opportunities, challenges and potential strategies related to Hong Kong's waste management system. The objectives of the conference are as follows:

1. To demonstrate business leadership in sustainable resource management in different waste streams and to identify opportunities to scale-up actions
2. To engage the Government in waste management policy discussion and to be informed of the Government's strategic development in coming years
3. To foster cross-sector partnership in knowledge sharing and joined-up initiatives



## Program Rundown

Time	Topic
<b>08:40 – 09:10</b>	<b>Registration</b>
<b>09:10 – 09:15</b>	<b>Welcome Remarks</b> Mr Adam Koo, Chief Executive Officer, Business Environment Council
<b>09:15 – 09:35</b>	<b>Guest of Honour and Keynote Speech</b> Mr Wong Kam-sing, GBS, JP, Secretary for the Environment, HKSAR Government
<b>09:35 – 09:55</b>	<b>The Business of Waste – European Experience</b> Ms Vicky Pollard, EU Environment and Climate Counsellor in China
<b>09:55 – 10:15</b>	<b>The Business of Waste – Asian Perspective</b> Mr Merlin Lao, Programme Manager, ICLEI East Asia Secretariat
<b>10:15 – 10:35</b>	<b>Morning Networking Break</b>
<b>10:35 – 12:20</b>	<b>Plenary 1: Legislation, Resource Management and Business Opportunities</b> Moderator: Mr CW Cheung, Director – Development, Business Environment Council
	<b>Producer Responsibility Scheme on Plastic Beverage Containers</b> Mr Donald Ng, Deputy Director of Environmental Protection, HKSAR Government
	<b>MSW Charging Trial Scheme</b> Mr Raymond Fong, General Manager, Environmental Management Division, Hong Kong Productivity Council
	<b>Recycling MSW into High Value Products</b> Dr Tin Lau, Technical Manager, Nano and Advanced Materials Institute Limited
	<b>Panel Discussion 1</b> Mr Donald Ng, Deputy Director of Environmental Protection, HKSAR Government Mr Raymond Fong, General Manager, Environmental Management Division, Hong Kong Productivity Council Dr Tin Lau, Technical Manager, Nano and Advanced Materials Institute Limited Mr Philippe Li, Business Development Manager, HK Recycles Mr Norman Cheng, Executive Committee Member, Hong Kong Waste Management Association Mr Tom Uiterwaal, Chairman, Environmental & Energy Business Council, European Chamber of Commerce in Hong Kong
<b>12:20 – 13:35</b>	<b>Networking Luncheon</b>

Time	Topic
<b>13:35 – 15:05</b>	<b>Plenary 2: Single-use Plastics</b> Moderator: Mr Simon Ng, Director – Policy & Research, Business Environment Council
	<b>Solutions to an Ocean of Plastic</b> Mr Craig Leeson, Global Chief Evangelist, Plastic Ocean Foundation
	<b>Government Initiatives on Reducing Single-use Plastic</b> Mr Charles Cheung, Senior Environmental Protection Officer, HKSAR Government
	<b>Panel Discussion 2</b> Mr Craig Leeson, Global Chief Evangelist, Plastic Ocean Foundation Mr Charles Cheung, Senior Environmental Protection Officer, HKSAR Government Mr Edwin Lau, Executive Director, The Green Earth Ms Geraldine Leung, Area Director, Communications APAC, Metsä Board Ms Katie Tang, Head of Corporate, Foodpanda Mr William Davies, General Manager – Sustainability, Swire Beverages
<b>15:05 – 15:25</b>	<b>Afternoon Networking Break</b>
<b>15:25 – 16:55</b>	<b>Plenary 3: Food waste</b> Moderator: Ir CF Leung, Director – Operations, Business Environment Council
	<b>Government Initiatives on Food Waste Reduction</b> Ms Theresa Wu, Senior Environmental Protection Officer, HKSAR Government
	<b>From Used Cooking Oil to Biodiesel</b> Mr Michael Shung, Senior Procurement Manager, Maxim’s Group
	<b>Food Waste and Green Airport</b> Ms Kristy Tan, Manager, Environment, Airport Authority Hong Kong
	<b>Panel Discussion 3</b> Ms Theresa Wu, Senior Environmental Protection Officer, HKSAR Government Ms Kristy Tan, Manager, Environment, Airport Authority Hong Kong Mr Michael Shung, Senior Procurement Manager, Maxim’s Group Ms Ellie Tang, Head of Sustainability, New World Development Company Limited Mr Henry Ho, Assistant Environmental & Hygiene Manager, Cathay Pacific Catering Services (H.K.) Ltd. Ms Aurea Yung, Head of Operations, the Foodlink Foundation
<b>16:55 – 17:00</b>	<b>Closing Remarks</b> Mr Richard Lancaster, Chairman, Business Environment Council and CEO, CLP Holdings Limited

## II. Conference Opening

### Opening Remarks

#### Mr Adam Koo

Chief Executive Officer, Business Environment Council Limited

Mr Koo acknowledged that while the Municipal Solid Waste (MSW) Charging Scheme, when implemented, should change consumer behaviour and reduce the overall waste disposal rate in Hong Kong, a long term strategy for waste reduction and resource management is even more crucial in solving this urgent issue. Such a plan can only be realised with strong support from the business sector – a group of significant generators of waste in Hong Kong. He expressed hopes for the conference as a platform for entrepreneurs, policymakers and experts to explore strategies and move Hong Kong towards a low carbon and circular economy.

### Guest of Honour and Keynote Speech

#### Mr Wong Kam-sing

GBS, J.P., Secretary for the Environment, HKSAR Government

Secretary Wong provided an update on the current waste-related policies in Hong Kong:

1. Producer responsibility scheme (PRS) is a crucial policy tool for managing waste in Hong Kong, implementing the "polluter pays" principle.
2. The bill on MSW charging has been submitted to the Legislative Council. A bills committee has been formed to scrutinise its details. Heeding the feedback from the public engagement, the MSW charging scheme will be implemented in phases, including a preparation period and an enforcement grace period.
3. The Government has been working on food-waste-to-energy in Hong Kong. The first Organic Resources Recovery Centre (ORRC), also known as O · PARK1, has been in operation since mid-2018. The second and third phases will situate in Sha Ling and Yuen Long. The first two phases follow a Design-Build-and-Operate model; for the third phase, the Government plans to engage with the business and trade sectors to include more innovative technologies.

4. In response to Mainland China's tightened requirements for imported waste, the Government has allotted an area of two hectares for a paper recycling plant.

## Overview of the European Union (EU)'s Approach to Plastics and Marine Litter

**Ms Vicky Pollard**

EU Environment and Climate Counsellor in China

Ms Pollard shared about the EU's approach to circular economy:

1. All plastic packaging placed on the EU market must be reusable or recyclable by 2030.
2. The European Chemicals Agency (ECHA) proposed an EU-wide restriction on the intentional addition of microplastics under the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulation.
3. Starting from 2021, a range of single-use plastics, including plastic cutlery and oxo-degradable plastics, will be banned in the EU.
4. In 2015, the EU published its Circular Economy Action Plan with 54 measures. A progress report released in March 2019 reviewed the effectiveness of these measures, and found that all measures have been delivered.
5. The EU conducted a review on all of their waste regulations in 2018. Moving forward, the EU will address the packaging waste issue, by introducing measures on the prevention and reuse of packaging.



### ***The Waste Package: The Way Forward***

- **Ambitious long-term targets** → recycling of municipal/packaging waste with specific targets for plastic packaging
- Forward-looking **calculation rules**
- **Landfilling restrictions** for separately collected and recyclable waste
- Measures on **prevention** & encouraging the **reuse** of packaging
- Minimum requirements for **producer responsibility schemes**: producers to bear the cost of waste management
- Continuously improving **separate collection**

- The Circular Plastics Alliance, launched in December 2018, gathers critical stakeholders in the plastics value chain and encourage actions to achieve the EU target of recycling 10 million tonnes of waste plastic into new products. Under the Alliance, manufacturers commit to produce products made from waste plastics, and companies commit to procure recycled plastic products.

## Tackle Waste Crisis in East Asia

**Mr Merlin Lao**

Program Manager, ICLEI East Asia Secretariat

Mr Lao provided an introduction to the projects done by ICLEI in Asia:

- ICLEI – also known as the Local Governments for Sustainability, is a global city network with more than 1,750 city members worldwide committed to sustainable urban development. ICLEI places its focus on urban sustainability and green circular cities coalition. There are 96 ICLEI city members in East Asia.

### PROJECTS & ACTIVITIES

項目與活動



- In 2013, the South Korean Government introduced a compulsory food waste recycling scheme using biodegradable compost bags for collection. Automated bins with scales and radio frequency identification technology (RFID) has also been introduced to charge residents on food waste.
- Other circular economy opportunities in South Korea include:

- Over 90% of the food waste is recycled in Seoul, and the metropolitan government provides financial subsidies for installing composters. The city is also turning abandoned land into urban farms to better utilise fertilisers produced from composting.
  - In the city of Gimje, soldier flies are used to compost and convert food waste into commercial fertilisers.
4. Mr Lao also described the actions against single-use plastics in Japan:
- Japan disposes of 9 million tonnes of plastic waste annually.
  - Osaka and Tokyo have banned plastic straws.
  - MOS Burger – a local fast food chain, has introduced the use of paper cutlery.
  - Cities like Kyoto and Kameoka have introduced plans to ban plastic bags.
  - Circular Economy opportunities in Japan include:
    - Public procurement – labelling systems and mandatory use of recycling materials in the production of goods.
    - Introduction of plastic packaging reduction schemes through taxes and bans.
5. ICLEI formed 6 thematic areas and practical measures for the Green Circular Cities Coalition, which includes:

## GREEN CIRCULAR CITIES COALITION

綠色循環城市聯盟



6. Mr Lao concluded by stating that cities with innovative solutions developed by public and private cooperation can accelerate circular development.

# III. Plenary 1: Legislation, Resource Management, and Business Opportunities

## Producer Responsibility Scheme on Plastic Beverage Containers

Mr Donald Ng

Deputy Director of Environment Protection, HKSAR Government

Mr Ng provided an overview of the PRSs currently being implemented in Hong Kong, namely:



1. The plastic shopping bag (PSB) charging scheme, which was first implemented in major retail chains in 2009 and expanded to cover all retail outlets in 2015. The scheme's effectiveness is being reviewed.
2. The PRS on waste electrical and electronic equipment (WEEE), which was fully implemented in 2018, covering source separation, collection, proper treatment and recycling for eight types of WEEE, underpinned by the Government-developed treatment and recycling facility, the WEEE- PARK, which has turned 17,500 tonnes of WEEE into resources.
3. The PRS on glass beverage containers, under which a territory-wide collection and treatment service for waste glass containers was commenced in 2018, with significant increases in the tonnage collected and the number of relevant collection points.

Mr Ng expounded in detail the next PRS in the pipeline on plastic beverage containers:

1. A feasibility study commissioned by EPD in 2017 recommended the Government to adopt a phased approach for the proposed PRS, targeting first at plastic beverage containers. The study also recommended looking into possible application of reverse vending machines (RVMs) and considering arrangements similar to a deposit-refund system (DRS).
2. Providing a rebate in a DRS-type arrangement would create an incentive for consumers to return used containers, thereby achieving a higher recovery. This notwithstanding, a balance needs to be struck to avoid overly impacting consumers or attracting an influx of waste containers.
3. A convenient network of returning points is crucial to the success of a DRS-type arrangement. Many places mandate retailers to accept return and refund the deposits, ensuring the concept of shared eco-responsibility. In Hong Kong, we also have to be mindful of the space constraints.
4. RVMs are commonly deployed in many places to enhance return efficiency, offering instant record and containers returned are in better quality. Cost-effectiveness (and again, space constraints) will have to be looked into.
5. Going forward, the Government will continue to engage stakeholders, prepare for the pilot scheme on RVM, and launch a consultation with the public in due course.

## **MSW Charging Trial Scheme**

### **Ir Raymond Fong**

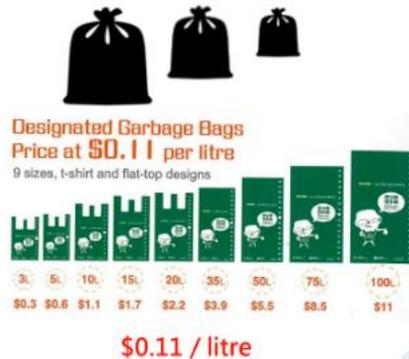
General Manager, Environmental Management Division, Hong Kong Productivity Council

Ir Fong detailed the results of local waste charging trials conducted in recent years:

1. Hong Kong disposes of 15,000 tonnes of solid waste per day. 68% of MSW was disposed of in landfills in 2017, and only 32% of them were recovered.
2. The Government proposed two MSW charging mechanisms: (i) designated garbage bags, and (ii) charge by weight.

## Proposed MSW Charging Mechanism by the Government

### By Designated Garbage Bags



### By Weight



**\$365-\$395 / tonne**

\* Four urban refuse transfer stations and the North West New Territories Refuse Transfer Station: \$395/Tonne  
\* Other refuse transfer stations and landfills: \$365/Tonne

HKPC<sup>®</sup>

- The Hong Kong Productivity Council (HKPC) has been working on the formulation of the MSW charging policy in Hong Kong:
  - The HKPC organised public engagement exercises, including regional forums, exhibitions, and focus group meetings.
  - The HKPC has been running MSW charging trials at the airport, wet markets, shopping malls, offices, hotels, restaurants and kitchens. A mobile application with QR codes and a cloud database, and smart weighing scales connected with an RFID system were among the types of technologies used in the trials.

## Recycling MSW into High-value Products

**Dr Tin Lau**

Technical Manager, Nano and Advanced Materials Institute (NAMI) Limited

Dr Lau explained to the audience that innovative recycling technologies can be utilised to create high-value products:

- Plastics can be categorised into thermoplastic (mainly recycled by heating) and thermoset (hard to be melted, dissolved, or blended).

2. NAMI has developed a supercritical technology that uses water or alcohol to break down the network structure in thermoset waste, allowing thermal recycling to take place. This process produces products with high purity and yield, generates less chemical waste, and has a relatively simple operating system.
3. Plastic composites can be filled with wood fibres from recycled wood waste to produce wood plastic composites. They can serve as alternatives to conventional wood products but with greatly improved durability whilst maintain wood-like aesthetics. They are widely available with a low cost, and can be further recycled after use.
4. Glass can be recycled into sand, or antimicrobial recycling glass surfaces that can be used for countertops, floor, and wall tiles.
5. Food waste can also be recycled to create high-value products, for example:
  - mixed food waste can be turned into biodegradable plastic bags, liquid organic fertiliser, biodiesel and pet feed;
  - spent coffee can be transformed into ground into high value activated carbon and cat litter; and
  - eggshell can be used to produce health supplements.



## Panel Discussion 1



### **Panellists (from left to right):**

Mr Philippe Li, Business Development Manager, HK Recycles

Dr Tin Lau, Technical Manager, Nano and Advanced Materials Institute Limited

Mr Raymond Fong, General Manager, Environmental Management Division, Hong Kong Productivity Council

Mr Donald Ng, Deputy Director of Environmental Protection, HKSAR Government

Mr Norman Cheng, Executive Committee Member, Hong Kong Waste Management Association

Mr Tom Uiterwaal, Chairman, Environmental & Energy Business Council, European Chamber of Commerce in Hong Kong

Mr CW Cheng (Moderator), Director – Development, Business Environment Council Limited

### **Opportunities for Hong Kong:**

- Hong Kong's per capita MSW disposal figure, with a 3% year-on-year increase to 1.45 kg per capita per day in 2017, has not been very encouraging, and the city may miss its 2022 target (0.8 kg per capita per day) set out in the Hong Kong Blueprint for Sustainable Use of Resources.
- It is expected that the MSW charging scheme can reduce the per capita MSW disposal rate by 20%.

- Businesses and consumers should start recognising the value of MSW, and the market for it.
- There are usually 3 progressions of a business' attitude towards environmental performance:
  - Stage 1: Commit to environmental performances due to compliance (passive approach)
  - Stage 2: Take environmental risk management into account to optimize the costs of environmental compliance (proactive approach)
  - Stage 3: Take sustainability into account to yield better results and uncover new business opportunities

As businesses hardly voluntarily jump from Stage 1 to Stage 3, it is imperative to have policies and regulations in place to facilitate companies in making critical decisions, provide businesses with a level playing field, and create business strategies within the boundaries and conditions conducive to our environment today.

#### Cultivating a waste-conscious mind-set

- Having MSW charging in place is a major step in educating consumers on realising the hidden environmental cost for waste disposal. This encourages consumers and the wider public to view waste reduction as a cost saving measure.
- MSW charging and developing waste management facilities should be pursued simultaneously to effectively reduce and recycle MSW.

#### Factors to consider

- There are concerns that some parts of the waste management industry, for example the recycling of WEEE and the proposed food and plastic waste collection pilots in Hong Kong, exhibit an oligopolistic behaviour. This may be partly attributable to government contractual arrangements. There are many potential players who can enter the market and develop recycling services. The Government should continue to foster a competitive recycling industry in Hong Kong.

- One main challenge in Hong Kong is the lack of land space to manufacture, store, and deliver recyclables and the corresponding recycled products. The possibility of developing recycling facilities vertically should be explored.

## IV. Plenary 2: Single-use Plastics

### Solutions to an Ocean of Plastic

#### Mr Craig Leeson

Global Chief Evangelist, Plastic Ocean Foundation

Mr Leeson shared a trailer of feature film called "A Plastic Ocean" and explained the inspirations and messages in creating the film:

1. Initially, the film's focus was on the marine environment. Research findings as shared on the film showed that the plastic waste problem is not just affecting the marine ecosystem, but also on human health. As a result, the film later became a land-based documentary.
2. Microplastics are everywhere: in table salt and even in the air we breathe. The human body now collects and accumulates microplastics. They are also transferred to our children developing the womb of pregnant women. It is essential for this message to be conveyed to the audiences.
3. Legislations are essential in combatting waste. People and businesses are like water – we choose the path with the least resistance. If a legislature is in place, people and businesses will change.
4. When something is called a resource rather than 'waste', it changes people's perceptions and attitudes.

### Government Initiatives on Reducing Single-use Plastic

#### Mr Charles Cheung

Senior Environment Protection Officer, HKSAR Government

Mr Cheung provided updates on the Government efforts in reducing single-use plastics:

1. The EU, UK, France, and Australia are examples of places with existing policies to control single-use plastics.
2. Hong Kong disposes of 10,733 tonnes of MSW at landfills every day in 2017.
3. Plastic recycling has faced several challenges, including the contamination of recyclables, improper source separation, as well as the high operating cost of collection, storage, and transportation.

4. In the Chief Executive's 2018 policy address, the Government will launch a pilot scheme on free collection and recycling service for all types of waste plastics to reinstate the public's confidence in plastic recycling. A 2-year pilot scheme will be launched in 3 districts (Eastern, Kwun Tong, and Shatin) in 2019.
5. The Government will reduce the use of plastics at premises they own.



**Reduce the use of disposable plastic tableware**

**Government to take the lead**

- × Plastic straws and poly-foam food containers **banned** in government canteens
- × Require restaurant operators in suitable **Government venues to avoid using disposable plastic tableware**
- × If necessary, use **non-plastic disposables** as alternatives
  - ✓ provide **on request** only
  - ✓ encourage **cost-recovery**



18

6. A consultancy study was commenced in April 2019 on the feasibility of controlling or banning disposable cutlery. Other affordable alternatives to reduce disposable tableware will also be considered. The study is scheduled for completion by the end of 2020.

## Panel Discussion 2



### **Panellists (from left to right):**

Ms Katie Tang, Head of Corporate, Foodpanda

Ms Geraldine Leung, Area Director, Communications APAC, Metsä Board

Mr Charles Cheung, Senior Environmental Protection Officer, HKSAR Government

Mr Edwin Lau, Executive Director, The Green Earth

Mr William Davies, General Manager - Sustainability, Swire Beverages

Mr Simon Ng (Moderator), Director – Policy & Research, Business Environment Council Limited

### **Lessons learnt**

- To better raise awareness and gain support for waste-related policies, it may be more fitting to frame our environmental crisis as a public health issue which affects livelihoods, especially those of our future generations.
- The Drink Without Waste initiative, which has the objective to build consensus among key stakeholders on how to prevent single-use beverage packaging from being disposed of in landfills, creates a supportive environment for manufacturers and NGOs to collaborate and exchange ideas on the way forward.

### **On different types of waste plastic**

- The Government's central plastic recyclables collection service pilots will cover all types of waste plastics. To ensure that the collected waste plastics are properly recycled, the operators will essentially be paid only according to the amount of waste plastics processed.
- There are variations within each type of plastic, and many of those have a low intrinsic value. One method of recycling includes breaking down polymers into monomers, for example through pyrolysis, but the environmental footprints (e.g. carbon and water) of the process also need to be considered.

### **What panellists think could be done as a part of the solution**

- For food delivery, switch to reusable containers and encourage group meal orders delivered in reusable trays to reduce individual lunchboxes.
- Always be mindful of the waste hierarchy – avoidance of waste in the first place.
- Aggressively look for alternatives and phase out single-use plastics.

## V. Plenary 3: Food Waste

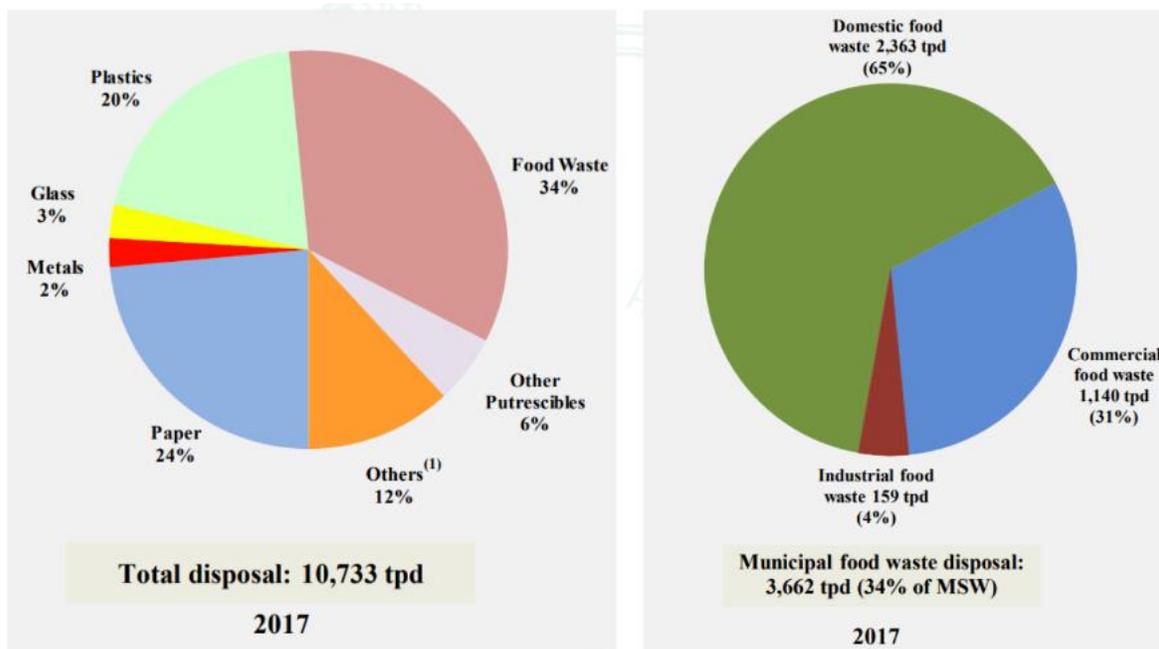
### Government Initiatives on Food Waste Reduction

**Ms Theresa Wu**

Senior Environmental Protection Officer, HKSAR Government

Ms Wu highlighted the Government's food waste reduction and recycling initiatives in recent years:

1. Food waste occupied the most significant percentage (34%) of MSW in 2017.



2. The Food Wise Hong Kong Campaign aims to promote public awareness and instil behavioural changes in various sectors to reduce food waste generation, as well as to serve as good practice guides for various sectors.
3. Through the Environment and Conservation Fund (ECF), the Government has supported 34 NGO projects and HK\$ 60 million for the collection of 5,000 tonnes of surplus food for donation to about 5 million people. The ECF also funded a pilot programme for small food waste composters at schools.
4. The Government initiated the Food Wise Charter to avoid food waste at source, which now has more than 800 signatories. The Food Wise Eateries Scheme certified over 800 eateries that have made efforts to reduce food waste.

- O · PARK1, the first ORRC was commissioned in July 2018 at Siu Ho Wan, Lantau Island, capable of handling 200 tonnes of food waste per day. The Government plans to build 5 to 6 ORRCs in the territory to turn food waste into energy.
- As mentioned in the 2018 Policy Agenda, the Government also seeks to implement the food waste/sewage sludge anaerobic co-digestion trial scheme, which can enhance biogas yield, and reduce energy consumption of existing sewage treatment plants.

## From Used Cooking Oil to Biodiesel

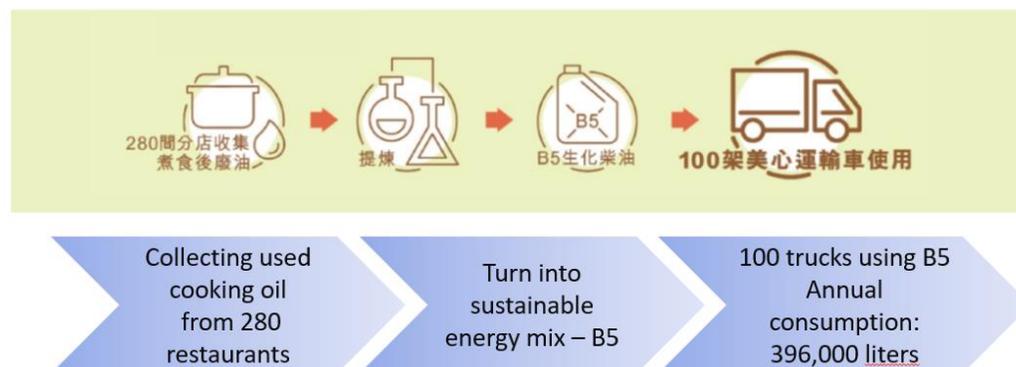
### Mr Michael Shung

Senior Procurement Manager, Environment, Maxim's Group

Mr Shung explained Maxim's Groups waste management strategy, with a focus on food waste reduction:

- Since 2009, Maxim's bakeries have donated more than 4.75 million pieces of leftover bread to over 90 NGOs.
- After the commencement of O · PARK1, the group donates 4 to 7 tonnes of food waste to the facility every day.
- The group is also working with Shell to turn used cooking oil into B5 biodiesel. Maxim's partners collect used cooking oil from 280 restaurants across Hong Kong. Waste oil is then extracted and converted into B5 biodiesel, to be used by Maxim's delivery trucks.

### THE B5 JOURNEY



## Food Waste and Green Airport

### Ms Kristy Tan

Manager, Environment, Airport Authority Hong Kong

Ms Tan gave an overview of the airport-wide programmes on food waste recycling and food donation:

1. As the majority of employees and hence environmental footprint of the Hong Kong International Airport (HKIA) are from Airport Authority Hong Kong (AAHK)'s business partners and tenants, AAHK has adopted an airport-wide approach in dealing with food waste reduction and recycling. In 2018, over 2,000 tonnes of food waste were collected in HKIA, of which 14% were generated by AAHK terminals and offices.
2. When designing airport-wide food waste programmes, the HKIA considered 3 fundamental principles: easy, useful, and free.



3. The food donation programme has been in operation since 2013. The programme extended to Tung Chung and Discovery Bay in 2016, and collected over 50 tonnes of food in 2018 for the underprivileged local community in Tung Chung.
4. To increase the food waste capture rate, AAHK has to engage and collaborate with its tenants and business partners.

## Improving food waste capture rate at HKIA

### Performance-based contract

- Setting a **minimum recycling target** for each year with incentive payments.
- Recycling **bonus** is allocated to frontline staff to catalyse change in workers' behaviours

### ISO 14001

- Increased **third party monitoring** leading to quantifiable outcomes.



Food waste recycling rate **increased around 200%** over the past 12 months.

### Recognition scheme

- Bi-annual campaign to recognize business partners' efforts in environmental management.
- Over **100 tenants** received awards in 2017.

### Training and inspection

- **Regular training** and onsite inspection to educate tenants on waste separation at source.

5. The initiatives reduced airport-wide carbon footprint, supported local communities in partnership with NGOs, and promoted the AAHK's pursuit of the greenest airport pledge.

## Panel Discussion 3



### **Panellists (from left to right):**

Mr Henry Ho, Assistant Environmental & Hygiene Manager, Cathay Pacific Catering Services (H.K.) Ltd.

Ms Aurea Yung, Head of Operations, the Foodlink Foundation

Ms Kristy Tan, Manager, Environment, Airport Authority Hong Kong

Ms Theresa Wu, Senior Environmental Protection Officer, HKSAR Government

Mr Michael Shung, Senior Procurement Manager, Maxim's Group

Ms Ellie Tang, Head of Sustainability, New World Development Company Limited

Ir CF Leung (Moderator), Director – Operations, Business Environment Council Limited

### **Collaborating to reduce food waste**

- Cathay Pacific Catering Services has benefited from the AAHK's airport-wide programme that provides bins and logistical support to airport operators. This helps the company to focus their resources on facilitating chefs and staff to recycle and reducing food waste.

- To reduce the logistical burden, New World Development deployed an onsite decomposer in the K11 art mall to process food waste generated by customers, retail tenants and restaurants in the nearby area.
- Foodlink Foundation operates by connecting the supply to the demand for food. Foodlink collects safe-to-eat surplus food from hotels, corporate and school canteens, and delivers to those in need. The benefits are twofold – while reducing the pressure on our city’s landfills, they also mitigate hunger.
- AAHK requires all of their tenants to submit an environmental management plan, which includes formulating food waste reduction initiative programmes, with enhanced monitoring to ensure the plans are carried out. AAHK also provides waste separation and recycling facilities together with the training needed to operate those facilities, and extensive training to contractors.

### **On biodiesel**

- The current locations of biodiesel refuelling stations are inconvenient, and the small number of refuelling stations discourage the wider use of biodiesel.
- Driving the demand for B5 biodiesel will take time and effort, especially under the competition with the increasing popularity in the electrification of vehicles.

## VI. Closing Remarks

### Mr Richard Lancaster

Chairman, Business Environment Council and CEO, CLP Holdings Limited

Mr Lancaster thanked the sponsors and the audience for their enthusiasm at the conference. He pointed out three takeaways from the event:

1. **Businesses showcased their leadership in environmental issues.** Companies are tackling the waste issue effectively and proactively instead of waiting for government regulations.
2. **Engagements demonstrated by businesses were strong.** There is already a consensus amongst the participants across sectors that, in Hong Kong, waste is an urgent environmental problem. Speakers and panellists – companies across multiple sectors – have plans, actions, and are eager to be a part of the solution.
3. **Collaboration proved to be important.** Solutions to waste presented partnerships between governments and businesses, owners and tenants, and businesses and NGOs.



## Glossary

AAHK	Airport Authority Hong Kong
DRS	Deposit and Refund System
ECF	Environment and Conservation Fund
ECHA	European Chemicals Agency
EPD	Environmental Protection Department
EU	European Union
HKIA	Hong Kong International Airport
HKPC	Hong Kong Productivity Council
ICLEI	Local Governments for Sustainability
MSW	Municipal Solid Waste
NAMI	Nano and Advanced Materials Institute
ORRC	Organic Resources Recovery Centre
PRS	Producer Responsibility Scheme
PSB	Plastic Shopping Bag
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RFID	Radio-frequency Identification
RVM	Reverse Vending Machine
WEEE	Waste Electrical and Electronic Equipment

## Sponsors:

### Bronze Sponsors



### Student Support Sponsors





2/F, 77 Tat Chee Avenue, Kowloon Tong, Hong Kong

Tel: (852) 2784 3900 Fax: (852) 2784 6699

<http://www.bec.org.hk>

### **About BEC**

Business Environment Council Limited (“BEC”) is an independent, charitable membership organisation, established by the business sector in Hong Kong. Since its establishment in 1992, BEC has been at the forefront of promoting environmental excellence by advocating the uptake of clean technologies and practices which reduce waste, conserve resources, prevent pollution and improve corporate environmental and social responsibility. BEC offers sustainable solutions and professional services covering advisory, research, assessment, training and award programs for government, business and the community, thus enabling environmental protection and contributing to the transition to a low carbon economy.

### **Disclaimer**

This report has been prepared by Business Environment Council Limited (“BEC”) on the basis of speaker presentations and discussion at the event. The views contained therein do not necessarily reflect BEC’s formal policy position. The report is not intended as a precise account of the event and the information provided at the event has not been independently verified. The information contained is of a general nature, and is not intended to address the circumstances of any particular company or entity and BEC is not, by means of this publication, rendering any business, financial, legal, or other professional advice or services in any form. BEC shall not be liable for any loss, damage, cost or expense incurred or arising by reason of any person or entity using or relying on information in this publication.

### **Copyright**

© 2019 Business Environment Council Limited

All rights reserved. No part of this Report may be reprinted, reproduced or utilised in any form or by any electronic, mechanical or other means, now known or hereafter invented, without prior permission in writing from Business Environment Council Limited.