

**For discussion on
16 December 2013**

**LEGISLATIVE COUNCIL PANEL ON
ENVIRONMENTAL AFFAIRS**

**VISIT TO EUROPE ON
THERMAL WASTE TREATMENT FACILITIES**

PURPOSE

This paper outlines the Administration's plan to visit Europe to learn their experience on the development and operation of thermal waste treatment facilities.

**HONG KONG BLUEPRINT FOR SUSTAINABLE USE OF
RESOURCES 2013-2022**

2 To tackle our imminent waste challenge, the Environment Bureau released the "Hong Kong Blueprint for Sustainable Use of Resources 2013-2022" (hereafter referred to as the "Action Blueprint") on 20 May 2013. The Action Blueprint maps out a comprehensive waste management strategy, with targets, policies and action plans for the coming 10 years. It has set an aggressive target to reduce the per capita disposal rate of municipal solid waste (MSW) by 40% by 2022. To achieve this goal, the Action Blueprint proposes policies and actions in three areas, with multiple and concurrent actions to:

- (a) drive behavioural change for waste reduction through policies and legislation, including MSW charging and producer responsibility schemes;
- (b) roll out targeted territory-wide waste reduction campaigns to mobilize the public;
- (c) allocate resources for waste-related infrastructure, including organic waste treatment facilities (OWTFs), waste-to-energy integrated waste management facilities (IWMF) etc.; and
- (d) timely extension of landfills.

3. The Action Blueprint sets out the goal of transforming Hong Kong's waste management structure to 55% recycling, 23% incineration and 22% landfilling by 2022. The IWMF Phase 1 which can significantly reduce the volume of 3 000 tonnes MSW each day is an essential infrastructure set out in the Action Blueprint for achieving this transformation. It is an essential tool to help Hong Kong reduce reliance on landfills.

OVERSEAS EXPERIENCE

4. To complement the work plan outlined above and to keep abreast of the latest development and operation of the following thermal waste treatment technologies, the Administration plans to visit Europe, including UK, the Netherlands, Denmark and Sweden between 3 and 7 March 2014. Technologies to be covered are:

- (a) Moving-grate incineration technology;
- (b) Plasma gasification technology; and
- (c) Gasification and Pyrolysis technologies.

5. An outline programme is at the Annex for reference. We seek to achieve better understanding on the following in the visit:

- (a) the development of mainstream incineration technology in Europe over the past decades, in terms of technology reliability, emission control, environmental impacts, public acceptance, etc.;
- (b) latest development and experience of alternative MSW treatment technologies and their potential of application in Hong Kong in future; and
- (c) waste management infrastructure experience and plans of the host countries.

It is expected that relevant knowledge and updates could benefit our planning for waste management in Hong Kong beyond 2022.




ADVICE SOUGHT




6. Members are invited to note the Administration's planned visit and consider whether the Panel is interested in conducting a similar visit.

**Environment Bureau
December 2013**

Visit to Europe on Thermal Waste Treatment Facilities
(3 to 7 March 2014)

Outline Programme
(tentative subject to adjustment)

Item	Features	Photos
2 March 2014: Hong Kong → UK		
Day 1 3 March 2014 (Monday) UK		
1	Visit New Earth Avonmouth Facilities ● Technology: Gasification & pyrolysis	
2.	Visit Swindon Gasification Plant ● Technology: Plasma Gasification	
Day 2 4 March 2014 (Tuesday) UK, evening flight to Amsterdam, the Netherlands		
3	Visit Lakeside Waste from Energy Facility ● Technology: Moving grate	
4	Meet with UK authority overseeing waste management	

Item	Features	Photos
Day 3 5 March 2014 (Wednesday) The Netherlands, evening flight to Copenhagen, Denmark		
5	Visit Afval Energie Dedrijf Waste Fired Power Plant in the Netherlands <ul style="list-style-type: none"> ● Technology: Moving grate 	
Day 4 6 March 2014 (Thursday) Denmark		
6	Visit Roskilde Waste-to-Energy Facility <ul style="list-style-type: none"> ● Technology: Moving grate ● Commissioning schedule: 2013 	
7	Visit to learn about the on-going project of Amager Bakke Waste-to-Energy Plant <ul style="list-style-type: none"> ● Technology: Moving grate ● Expected commissioning schedule: 2016-2017 	
Day 5 7 March 2014 (Friday) Denmark-Sweden-Denmark, evening flight back to Hong Kong		
8	Visit Malmö of Sweden, and meet its environmental authority, to understand their experience of engaging the community regarding waste infrastructure	