

三十會 香港上環永樂街 60-66 號昌泰商業大廈 304 室

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The 30SGroup - Environment and Energy Working Group (E&E WG)

三十會 環境與能源小組

17th March 2014

By E-mail

To: Hon Cyd HO Sau-lan Chairman, Panel on Environmental Affairs The legislative Council The Hong Kong Special Administrative Region

c/o Clerk to Panel on Environmental Affairs Legislative Council Secretariat Legislative Council Complex 1 Legislative Council Road Central, Hong Kong E-mail: yspang@legco.gov.hk

Re: Written Submission on Environmental infrastructure projects – (a) 5163DR: Northeast New Territories landfill extension; (b) 5164DR: Southeast New Territories landfill extension; (c) 5165DR: West New Territories landfill extension; and (d) 5177DR: Integrated Waste Management Facilities Phase 1

Dear Hon Mrs. HO,

Thank you for your Panel's invitation to The 30SGroup to submit our views as well as attending the Panel on Environmental Affairs meeting on 22nd March 2014. Established since 2003, The 30SGroup has served as a non-profit, non-partisan platform for young professionals interested in public affairs and policy issues of Hong Kong, and we have set up an Environment and Energy Working Group (E&E WG) since 2012 that aims at providing high-quality and impartial energy and environmental policy research for the long-term benefits of our community.

Our group agrees that Hong Kong has imminent need for additional Waste Treatment Facility and there are no other alternative at this stage but extension of Landfills,

however, the forward planning on waste treatment must be devised in such a way that the expansion of landfill must only be the final resort and actions in priority order should be "Reduction at Source", "Recycling", "and Waste to Energy", "Incineration of Municipal Waste and Landfill".

If we try to analyse the municipal waste treatment regime of Hong Kong SAR in the global context, we can understand that Hong Kong has been in a uniquely complicated policy situation where, given its relatively limited urban land resources for landfill expansion and the comparatively high per capita municipal waste generated and collected, its over-reliance on landfill as the dominant waste treatment policy option in past decades and lack of progress on other waste management options (such as waste-to-energy incineration; a sophisticated resource recycling industry) has today put our society into dilemma over the policymaking and public debate (see Figure 1 in Annex A). The 30SGroup understands that the HKSAR Government has proposed and will be implementing a multi-pronged approach to tackling Hong Kong's municipal waste issues as stated in its *Blueprint for Sustainable Use of Resources 2013-2022*.

However, it comes to our concern that the government-owned IWMF will only come into operation in 2019 and its daily capacity only reaches 3,000 tpd¹ while the projected municipal waste requiring disposal after various measures in 2017 is 10,000 tonnes per day.²

In order to avoid further consumption of land on landfill extension, which has become socially unacceptable and environmentally costly to manage, we also agree that the government's current proposal on building Hong Kong's first IWMF facility on a Design-Build-Operate (DBO) model is a legitimate approach, notwithstanding the public debates on the scale, total final cost as well as environmental impacts of this infrastructure.

In near future, we suggest that the HKSAR Government can consider to explore other options to accelerate the construction of a network of IWMF facilities for meeting the future needs of treating municipal solid waste through waste-to-energy facilities, especially with the introduction of private capitals, new proven technologies (e.g. plasma gasification) as well as in the regional context of Pearl River Delta/South China waste management market development:

- 1. The introduction of private capital to build, own and operate additional IWMF facilities through international tendering;
- 2. To study with Guangdong government for possible centralized regional Waste Treatment Facilities solution.

Taking into consideration that private capital are relatively efficient in capital spending and can bring synergy from other invested areas, with a totally privately owned IWMF operating under build-own-operate model, the government's position will only be a monitoring body rather an operating body, we believe that it is possible to formulate a commercial IWMF industry in Hong Kong through this means in future,

¹ Source: The Legislative Council Panel on Environmental Affairs discussion paper [CB(1)931/13-14 (01)], para. 38(a), p. 17.

² Source: The Legislative Council Panel on Environmental Affairs discussion paper [CB(1)931/13-14 (01)], para. 29, p. 13.

especially after more data on the actual impact of the first IWMF facility on the overall waste management scenarios in Hong Kong and the region when it will be in full operation.

There is also example of IWMF constructed in mainland which is much more costeffective than that in Hong Kong, a centralized regional IWMF will without doubt be another strategy the government can explore under economical consideration. Despite the ethical concerns, there is international example of cross border waste transfer of AVR in Holland that imports municipal waste from Italy to operate the IWMF, we consider this as a possible solution for Hong Kong in the broader geographic and strategic context of development of a Pearl River Delta Regional waste management market.

For enquiry, please contact the undersigned or Alex C.K. Chan at:

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Yours sincerely,

Alex WONG Co-Convenor, The 30SGroup – Environment and Energy Working Group

Annex A

Figure 1. Global situation on Municipal Waste Treatment Approaches (Source: United Nations)

– International Statistics on Municipal Waste Treatment Methods (by ratio)									
	latest	Municipal	Municipal	Municipal	Municipal	Municipal			
	year availabl	waste	waste	waste	waste	waste			
	e	collected	landfilled	incinerated	recycled	composted			
		map 🚠	map 🚠	map 🚠	map 🚠	map 📠			
		1000 tonnes	%	%	%	%			
Algeria	2003	8 500	99.9		0.1				
Andorra	2007	32		116.1 ¹	0.0	0.0			
Anguilla	2008	15	100.0	0.0	0.0	0.0			
Antigua and Barbuda	2009	136 ²	100.0	0.0	0.0	0.0			
Armenia	2009	411	100.0	0.0	0.0	0.0			
Australia	2003	8 903 ³	69.7		30.3				
Austria	2009	4 941⁴	0.7	29.4	30.2	39.7			
Belarus	2009	3 347	100.0						
Belgium	2009	5 277⁴	5.1	34.3	35.8	23.9			
Belize	2008	163	100.0						
Bosnia and Herzegovina	2009	1 422⁴	100.0						
British Virgin Islands	2005	37	0.0	80.3⁵	0.0	0.0			
Bulgaria	2009	3 561⁴	96.1	0.0	0.0	0.0			
Burkina Faso	2009	666 ^₅	92.0						
Cameroon	2009	7 249	99.6		0.4				
Canada	2004	13 375'			26.8	12.5°			
Chile	2009	6 151		0.0	0.4	0.5			
China	2009	157 340	56.6	12.9		1.1			
China, Hong Kong SAR	<mark>2009</mark>	<mark>6 450</mark>	<mark>50.7</mark>		<mark>49.3</mark>	<mark></mark>			
China, Macao SAR	2009	325°	22.610	99.8 ¹¹	0.1				
Croatia	2008	1 788	96.8	1.8		1.8			
Cuba	2009	4 264	87.2	0.0	5.1	7.7			
Cyprus	2009	620 ^{4,12}	86.312	0.012	13.712	0.012			
Czech Republic	2009	3 3104	72.2	10.5	2.1	2.0			
Denmark	2009	4 530 ^{4,12}	3.512	51.112	34.212	16.512			
Dominica	2005	21	100.0	0.0	0.0	0.0			
Estonia	2009	464⁴	61.9	0.2	11.2	9.3			
Finland	2009	2 562⁴	46.1	18.1	24.0	11.9			
France	2009	34 504⁴	32.3	33.9	18.2	15.6			
Germany	2009	48 101⁴	0.4	32.3	46.6	16.9			
Greece	2009	5 386 ^{4,12}	81.312	0.012	16.412	1.412			
Hungary	2009	4 31212	74.5	9.4	13.414	2.1			
Iceland	2009	177 ^{4,12}	68.412	10.212	13.012	2.312			
Iraq	2005	5 446		12.3					
Ireland	2009	3 300 ^{4,12}	60.6	2.612	31.8 ¹²	3.5 ¹²			
Italy	2009	32 500 ^{4,12}	49.2 ¹⁵	12.712	12.412	35.412			
Jamaica	2005	1 464	100.0	0.0	0.0	0.0			
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– International Statistics on Municipal Waste Treatment Methods (by ratio)

Japan	2003	54 36716	3.417	74.0	16.818	
Korea, Republic of	2004	18 252 ^₄	36.4	14.4	49.2	0.0
Kuwait	2009	1 723	100.0	0.0	0.0	0.0
Kyrgyzstan	2009	6 642 ^{19,20}	100.0	0.0	0.0	0.0
Latvia	2009	753⁴	92.2	0.1	7.4	0.3
Lebanon	2009	1 720	78.0		7.7	14.0
Lithuania	2009	1 206	90.6	0.0	3.1	1.3
Luxembourg	2009	349⁴	17.2	36.1	26.6	20.1
Madagascar	2007	419	96.7	0.0	0.0	3.5
Malta	2009	268⁴	95.1	0.0	4.1	0.0
Marshall Islands	2007	26		0.0	30.8	6.0
Mauritius	2009	408	97.1		2.9	
Mexico	2006	36 0884	96.7	0.0	3.3	0.0
Monaco	2009	37	0.0	132.6 ²¹	8.322	
Montenegro	2009	212			0.0	
Morocco	2000	6 500	98.0	0.0	2.0	0.0
Netherlands	2009	10 159 ⁴	0.7	33.1	27.2	23.4
New Zealand	1999	1 54123	84.724		15.325	
Niger	2005	9 750	64.0	12.0	4.0	
Norway	2009	2 269⁴	14.3	41.5	27.3	15.7
Occupied Palestinian Territory	2001	1 35026	100.0			
Peru	2001	4 740	65.7		14.7	
Poland	2009	12 053⁴	65.2	0.8	11.8	5.6
Portugal	2009	5 1854,27	61.727	18.5 ²⁷	8.227	11.628
Qatar	2009	789	94.1			5.9
Romania	2009	8 507⁴	76.9	0.0	0.9	0.0
Singapore	2009	6 114 ²⁹	2.430	40.6	57.0 ²²	
Slovakia	2009	1 8374,12	75.412	9.012	2.212	5.1 ¹²
Slovenia	2009	913⁴	68.8 ¹⁵	1.5	37.8	2.2
Spain	2009	25 090 ^₄	52.0	8.8	14.7	24.5
St. Vincent and the Grenadines	2002	38	84.9	0.0	15.122	
Sweden	2009	4 486⁴	1.4	48.4	35.4	13.8
Switzerland	2009	5 4604	0.0	48.7	34.2	17.0
Syrian Arab Republic The Former	2003	7 500	93.9 ³¹	5.3	1.132	
The Former Yugoslav Rep. of Macedonia	2009	552 ³³	100.0	0.0	0.0	0.0
Tunisia	2004	1 316	99.9			0.1
Turkey	2009	28 0064,12	84.812	0.012	0.0	1.1112
Uganda	2006	224	100.0	0.0		0.0
United Kingdom	2009	32 600 ^{4,12}	49.112	11.112	26.9 ¹²	14.7 ¹²
United States	2005	222 863 ^₄	54.3 ³⁴	13.6 ³⁵	23.8	8.4
Yemen	2009	1 410 ³⁶	100.0			

<u>Key references</u>: United Nations Statistics Division, *Environmental Indicators: Waste – Municipal Waste Treatment*. <u>https://unstats.un.org/unsd/environment/wastetreatment.htm</u> [Last update: March 2011].

Sources:

UNSD/UNEP Questionnaires on Environment Statistics, Waste section. Eurostat Environmental Data Centre on Waste (http://epp.eurostat.ec.europa.eu/portal/page/portal/waste/key_waste_streams/municipal_was te). OECD Environmental Data Compendium, Waste section.

About The 30SGroup

The 30SGroup is a forum that brings young professionals together to deepen our understanding of issues, educate our community and to contribute back to society. We are interested in the full range of issues covering culture, economy, education, environment, healthcare, labor, political development, and social welfare.

As a group, we have no perceived political position and are not affiliated with any other organizations. We do not have any financial support from other acquaintances or outside individuals. Through independent discourse and insistence on quality of content, we hope to reach and voice informed and substantiated opinion on issues that are important to our participants.

Our participants come from a spectrum of diverse professions in accounting, banking, education, entertainment, design, finance, government, healthcare, industries, law, marketing, media, telecommunications, trade and; transportation, etc. We believe as a group we are the representatives of the educated middle class in the society of Hong Kong.

The Group has set up an affiliate company, Social Ventures Hong Kong



in year 2007 which is the first non-government funded social venture philanthropy foundation in Hong Kong to promote the development of social enterprises. With the aim to drive the public's self initiated forces, through investment, professional knowledge and resources on connection and support, it aims to help the development of innovative social enterprise in Hong Kong. Being a pioneer of the charitable investor, the dedicated young professionals in Social Ventures Hong Kong have devoted in creating innovative ideas and promoting high participation and collaborations, with a view to improve the society as a whole.