

Legco
Hon Chairman and Members
Public Accounts Committee
Attention all Hon members

4th December 2015

Dear Hon Members,

We are aware of the upcoming meetings regarding:

Report No. 65

Subject	Programme	Webcast
Government's efforts in managing municipal solid waste (Chapter 1)	7/12/2015	
Reduction and recycling of food waste (Chapter 2)	12/12/2015	

I would urge all members to read the information we have provided for you at the following download link prior to such meetings:

https://www.dropbox.com/sh/6338finnyk28a43/AABNVxTAe9HH7llpaECHT0cLa?dl=0

One third of our daily MSW is ultra wet food waste. Hong Kong has the highest moisture content food waste in the world.

There is no legislation in place to enforce source separation of food waste or recyclables – why is that? Outside of Government housing estates the public has to arrange its own collection and transport of recyclables to recyclers. The vast majority, 95%, of paper and cardboard collected here (by 90 year old scavengers) is sold to China with few materials being left for the local recycling industry. The Govt profits from this sale.

Many recyclables such as plastic, bottles cardboard and paper are daily tainted beyond beneficial recycling use by food waste.

The HK Government EPD and ENB has lied for years about the supposed levels of recycling here.

It was only when China erected 'Operation Green Fence' that this came to light as container upon container of transit waste from overseas enroute to China trough HK port was blocked since China would no longer allow the tainted wastes to enter.

At the above weblink you will find a directory 'CIWEM' which contains four separate directories.



Dropbox > CIWEM >					
^	Name	Date modified	Туре		
	CiwemCorrsp	04-Dec-15 02:41 P	File folder		
	CiwemPolicy	04-Dec-15 02:36 P	File folder		
	SampleReports	04-Dec-15 02:36 P	File folder		
	ZeroWastePolicies	04-Dec-15 02:36 P	File folder		

In the first directory you will find these files:

Dropbox > CIWEM > CiwemCorrsp			
257 KB			
770 KB			
138 KB			
550 KB			
841 KB			

Upon reading 'SomefoodforthoughtUpdated' you will see our suggestion for the handling of all food waste in Hong Kong. The idea behind this was from a locally based highly experienced consulting engineer (who must remain nameless since he advises Government for a living.)

You will then see in the other files above, correspondence with Tim Evans, the head of CIWEM UK Waste Water Panel (who was incumbent there for 20 years as an expert advisor and witness) – his admirable Curriculum Vitae is shown. Such hands-on expertise is not available in Hong Kong. CIWEM repeatedly told us that the usage of the sewer system in Hong Kong was a **totally viable method** of handling our daily waste food load.

The food waste would be collected and taken to transfer stations where it would be industrially garburated and the high water content macerated remnants fed into the sewage network. Even before reaching Stonecutters the waste glop would have changed its consistency markedly and would be easily assimilated. Stonecutters daily waste water handling capacity is almost 2.5 million cubic meters of waste water per day and the current peak load has never exceeded 1.5 million cubic meters per day. The 3,600 cubic meters of food waste could pass through Stonecutters in under 7 minutes per day.

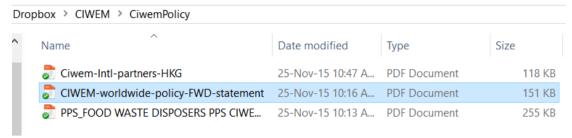
Anaerobic digestion.

Whereas in Europe the average moisture content of food waste hovers around 35%, in Hong Kong the wet market food waste is over 90%. Any resultant by-product of anaerobic digestion here will be of nigh unsaleable glop quality hence any anaerobic digester here would always run at a loss and is mal-thought out, especially at the ludicrous price being paid.

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In the next directory 'CiwemPolicy' please find the following files:



It is of interest that numerous local ENB/EPD staff pride themselves as members of CIWEM, including the former local chairman who is current head of AECOM, the Government incinerator consultants. Unfortunately the local CIWEM members choose to look the other way when CIWEM worldwide policy does not fit local (bad) policy.

The other two files are self explanatory and show CIWEM's worldwide policy on the use of food waste disposers and the sewerage system.

In the next directory you will find 'SampleReports'

Dro	pbox > CIWEM > SampleReports			
^	Name	Date modified	Туре	Size
	05-CR10 Bridging the gap between sewe	25-Nov-15 09:05 A	PDF Document	87 KE
	🔊 2011 The incompatibility of food waste d	25-Nov-15 09:05 A	PDF Document	31 KE
	2012 03 Biowaste&GreenwasteCollection	25-Nov-15 09:05 A	PDF Document	6,719 KE
	Jonathan Mattsson	25-Nov-15 09:05 A	PDF Document	664 KE
	Scientific FWD	01-Aug-14 10:51 A	PDF Document	373 KB

These expert reports would tend to destroy any local uneducated comments from people in EPD claiming to be engineers, who said that this idea could not work here, the Stonecutters screens would be blocked and the sewers would back up – yet failing to produce one iota of expert evidence to substantiate their waffle.

Indeed more and more cities are now moving towards this CIWEM policy after numerous world wide trials from UK, to Sydney to New York etc.

The Panel should ask why ENB / EPD did not fly out the CIWEM experts from UK to present to Legco.

Of course the answer is that if the food waste were removed and therefore many recyclables are revealed untainted and separated, there would be precious little left each day to merit building an incinerator, or rather three of them. Never mind the CO2 and pollutants emitted.

Rather than abandon a misguided burn-and-bury policy and local loss of face , the Govt instead leaves a big mess so they can just burn everything in a WOE plant (Waste of Energy) on a pristine island.

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But will everything burn at 850 degrees C? Indeed on an RTHK programme one such EPD 'engineer' Mr Elvis AU stated that at this 850 degrees C temperature 'all waste organic matter would be completely destroyed' (thereby defeating the laws of physics) and also stated heavy metals would also be completely destroyed (which actually requires a Super Nova), meanwhile conveniently forgetting that 30% by weight of what is burned remains as ash and fly ash, that need to be, landfilled ad infinitum.

Of course wet food waste has a calorific value (CV) of only <2MJ/kg and approximately >7 MJ/kg is required for combustion- so it will take energy rather than making energy and an accelerant (coal or oil) would have to be added to burn the water. Meanwhile the wet food waste will lower the burn temperature consistently in the proposed Mass Burn grate system and if the burn temperature drops you get nasty dioxins and furans. Never mind all the world wide studies showing deaths, cancers etc of people living in the environment downwind of incinerators.

In the next directory you will find 'ZeroWastePolicies'

Dropbox > CIWEM > ZeroWastePolicies				
^	Name	Date modified	Туре	Size
	City_of_LA_Zero_Waste_Progress_Report	25-Nov-15 12:54 P	PDF Document	6,089 KB
	SantaMon-Ehrlich-LOH-Resid	25-Nov-15 12:50 P	PDF Document	1,312 KB
	Santa Monica 80% Divert	25-Nov-15 12:48 P	PDF Document	588 KB
	SantaMonicaGreenBin	25-Nov-15 12:43 P	PDF Document	380 KB
	👼 SantaMonica-ZeroWaste	25-Nov-15 12:46 P	PDF Document	1,896 KB
	SwedenRecycle	25-Nov-15 01:00 P	PDF Document	3,462 KB
	Zerowaste_EU_case_studies	25-Nov-15 01:02 P	PDF Document	1,131 KB
	ZeroWasteltaly-list	25-Nov-15 01:12 P	PDF Document	1,539 KB

Where is Hong Kong's Zero Waste policy?

Please read through the attached international Zero Waste policy and progress reports. For example Santa Monica has a Green Bin collection scheme free of charge for food and garden waste and has a Zero Waste policy. But Ms Loh would know that since her family reside there. So why not here?

Recently legislators flew to Europe to look at incinerators. They visited Denmark yet failed to notice that Denmark's EPD has now moved markedly away from incineration and towards recycling after they discovered they were in breach of the Kyoto protocol on CO2 emissions (which also binds Hong Kong). The IPCC report at the link below is quite clear regarding CO2 emissions from the burning of MSW. Yet our ENB boss is telling us how he intends to reduce CO2 emissions!

http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php Kyoto Protocol Covers Hong Kong



www.ipcc-nggip.iges.or.jp/public/gp/bgp/5_3_Waste_Incineration.pdf IPCC report CONCLUSIONS

"The incineration of municipal waste involves the generation of climate-relevant emissions. These are mainly emissions of CO2, but also of N2, O, NOx, NH3, & organic C, In waste incineration plants, CO2 constitutes the CHIEF climate-relevant emission & is considerably higher, by not less than 10squared, than the other climate-relevant emissions. In Germany the incineration of 1 Mg of MSW in MSW incinerators is associated with the production/release of about 0.7 to 1.2 Mg of CO2 output."

http://tinyurl.com/lg2lyn4

Denmark moving away from incineration

http://tinyurl.com/oawceek

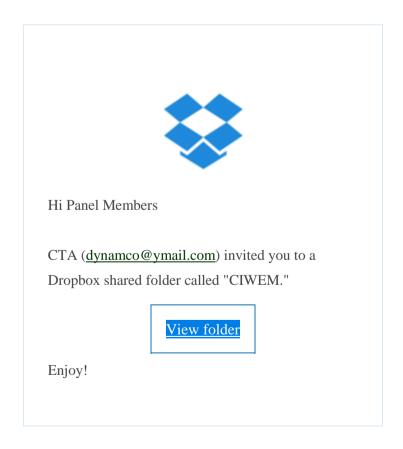
Dutch Govt ordered to cut carbon emissions in landmark court ruling

The behaviour, conduct, policy and lies of our ENB/EPD borders on Misconduct in Public Office.

Yours faithfully,

James Middleton

Chairman



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