

Legco Panel on Environmental Affairs
Legco Finance Panel Public Works Subcommittee

5th August 2014

Dear Panel Members,

Legislators should query in Legco why EPD's Elvis AU has seemingly deliberately lied in the press about the known IWMF costs which the Government has already requested in Legco as shown herewith, why he ignores the peer reviewed body of evidence on deaths and cancers with increased proximity to incinerators and why no action has been taken to follow CIWEM's worldwide policy guidelines on food waste, why there is no source separation of waste legislation in place, why there is no Government organised collection of resultant recyclables outside of Govt housing estates, why there is no GREEN Bin collection system for food and yard waste and what the true level of local recycling is, excluding transfer of imported cargo waste shipped via HK port to the Mainland etc http://www.ciwem.org/knowledge-networks/panels/wastewater-management/food-waste-disposers.aspx Garburate Green bin food waste at transfer stations and use the existing sewage system to handle our food waste

Nothing has changed on the Government's efforts since this decision:

www.legco.gov.hk/yr12-13/english/panels/ea/papers/ea0527cb1-1079-2-e.pdf
"15. The Panel held another special meeting on 20 April 2012 to continue discussion on the funding proposals. Noting that many measures pertaining to the Policy Framework had yet to be implemented, members were opposed to the reliance on landfills for waste disposal in view of the associated environmental nuisances, as well as the long lead time and cost incurred from restoration of landfills. They stressed the need for an holistic package of waste management measures (including waste reduction, separation and recycling) with waste incineration as a last resort and better communication between the two terms of Government on environmental policies, in particular on the need for incineration. They also urged the Administration to identify other suitable outlying islands for IWMF and promote the local recycling industry. In view of the foregoing, members did not support the submission of the funding proposals to the Public Works Subcommittee for consideration."

Kind regards,

James Middleton

Chairman

www.cleartheair.org.hk

8/F Eastwood Centre - 5, A Kung Ngam Village Road - Shaukeiwan, Hong Kong Tel: (+852) 25799398 26930177 Fax: (+852) 25659537 26027159



SCMP Online comment



Disingenuous AU blatantly quotes fake costs for IWMF (12.7bn)

Incinerator & landfill extns are an inseparable package

www.legco.gov.hk/yr11-12/english/panels/ea/papers/ea0326cb1-1369-1-e.pdf

 $CB(1)1369/11-12(01)\ 1.1.b)$ sets out the Administration's request @money-of-the-day prices

in March 2012

5177DR: IWMF Phase 1 14.96bn MOD - now 17bn 5163DR: NENT landfill ext 6.632bn MOD -now 8bn 5164DR: SENT landfill ext 1.76bn MOD -now over 2bn

5165DR: WENT landfill ext 33.4mn - now 36mn

The package is at least 27bn!

ADD a Pulau Semakau island as the new ash lagoons

www.scmp.com/business/article/1546110/incinerator-proposal-goes-legco-funding

Lai See's estimate: Incinerator 18.24 bn/Island 3.2 bn/ Operation 400 mn p.a. is way lacking AU ignores the sheer mass of peer reviewed reports showing increased deaths & cancers with proximity to incinerators.

Teesside 1000 tpd plant 1 is commissioning & clone plant 2 is under construction w/ one takeoff client: HM Govt

 $\underline{www.waste-management-world.com/articles/2014/04/video-ba-plasma-gasification-waste-to-jet-fuel-facility-set-for-take-off-incom/articles/2014/04/video-ba-plasma-gasification-waste-to-jet-fuel-facility-set-for-take-off-incom/articles/2014/04/video-ba-plasma-gasification-waste-to-jet-fuel-facility-set-for-take-off-incom/articles/2014/04/video-ba-plasma-gasification-waste-to-jet-fuel-facility-set-for-take-off-incom/articles/2014/04/video-ba-plasma-gasification-waste-to-jet-fuel-facility-set-for-take-off-incom/articles/2014/04/video-ba-plasma-gasification-waste-to-jet-fuel-facility-set-for-take-off-incom/articles/2014/04/video-ba-plasma-gasification-waste-to-jet-fuel-facility-set-for-take-off-incom/articles/2014/04/video-ba-plasma-gasification-waste-to-jet-fuel-facility-set-for-take-off-incom/articles/2014/04/video-ba-plasma-gasification-waste-to-jet-fuel-facility-set-for-take-off-incom/articles/2014/04/video-ba-plasma-gasification-waste-to-jet-fuel-facility-set-for-take-off-incom/articles/2014/04/video-ba-plasma-gasification-waste-to-jet-fuel-facility-set-fu$

n-essex.html

watch what BA's Willie Walsh has to say

Amager Bakke was opposed by Ida Auken then Danish Environment Minister who realized Denmark had to divest incineration due to CO2/Kyoto targets exceeded & promote recycling which is their current policy

Burning 1 kg MSW adds 1kg CO2 to the air.

www.ipcc.ch/

The latest IPCC report shows the need to urgently restrict CO2 emissions, not increase them

South China Morning Post 南華早報

Published on *South China Morning Post* (http://www.scmp.com)
Home > Is the Shek Kwu Chau incinerator the best solution for Hong Kong?

Is the Shek Kwu Chau incinerator the best solution for Hong Kong?

8/F Eastwood Centre - 5, A Kung Ngam Village Road - Shaukeiwan, Hong Kong

Tel: (+852) 25799398 26930177 Fax: (+852) 25659537 26027159



Tuesday, 05 August, 2014, 3:26am Business LAI SEE Howard Winn

Is the Shek Kwu Chau incinerator the best solution for Hong Kong?

Assistant Director of Environmental Protection Elvis Au has a letter in today's *South China Morning Post* in which he seeks to correct some "misunderstandings" that he believes have occurred in *Lai See* and other articles in the newspaper with respect to the government's controversial Shek Kwu Chau incinerator.

His beef with *Lai See* is that we have suggested as an alternative technology plasma gasification, rather than the moving grate technology to be used in the incinerator.

The advantages of gasification are that there are virtually no emissions, and the resultant synthesis gas from the process can be converted into electricity, or biofuel.

The incinerator will have a capacity of 3,000 tonnes of municipal solid waste per day. It will produce 20 to 30 per cent by weight of hazardous bottom ash. The government proposes to transport it to the ash lagoon at Tsang Tsui with a fleet of barges.

In contrast, plasma gasification produces an inert slag which can be used as aggregate in the construction industry.

Au says in his letter the plasma gasification plants *Lai See* referred to are "relatively small in scale with very limited performance track record. Our recent visit with legislators to Europe in March has reaffirmed this observation. It would take several years of operation before the effectiveness and efficacy of such gasification plants can be evaluated." This is a view which he repeats often. But some experts disagree with him.

Speaking at a conference last year, Professor Umberto Arena, a waste energy specialist from Second University in Naples, said the plasma arc technology had been tried and tested for more than 10 years.

Au says his view of the technology was "reaffirmed" during his recent visit to Europe. This is somewhat disingenuous since the group of legislators decided to visit a small working plant in Avonmouth, England. They were invited to visit a much bigger project in Teeside which is being commissioned but they declined the opportunity.

8/F Eastwood Centre - 5, A Kung Ngam Village Road - Shaukeiwan, Hong Kong Tel: (+852) 25799398 26930177 Fax: (+852) 25659537 26027159



Au has in the past assured us that the proposed incinerator will be compliant with European Union standards - the highest in the world - and therefore there is no need for concern over health impacts.

Yet, even in Europe, several doctors' associations (which included environmental chemists and toxicologists) in 2008 wrote to the European Parliament with concerns over incinerator particle emissions and the absence of specific fine and ultra-fine particle size monitoring or in depth industry/government epidemiological studies of these minute and invisible incinerator particle size emissions.

Despite the technology's apparent immaturity, plasma gasification plants are being planned by municipal authorities across the world, including China, the US, Britain, Indonesia and Canada.

In his letter, Au says the Shek Kwu Chau incinerator "has already been approved under various ordinances. Going for another site now will not be quicker as it will take considerable time to get the necessary approvals."

We can't help feeling that reluctance to rethink the incinerator project stems from an unwillingness to go through the process again, even though it is a plan that was conceived some time ago and new technologies are now available.

How confident can we be that we are getting the best waste management solution for Hong Kong? The project has so far been blocked by the Finance Committee. But if what we hear is correct, the Environmental Protection Department appears to have succeeded in doing deals with the various political groupings and the project is likely to be approved in the next legislative session.

Source URL (retrieved on Aug 5th 2014, 7:24am):

 $\underline{http://www.scmp.com/business/article/1566571/shek-kwu-chau-incinerator-best-solut} \\ \underline{ion-hong-kong}$

South China Morning Post 南華早報

Published on *South China Morning Post* (http://www.scmp.com)
Home > Incinerator will adopt proven, cost-effective technology on island

Incinerator will adopt proven, cost-effective technology on island

8/F Eastwood Centre - 5, A Kung Ngam Village Road - Shaukeiwan, Hong Kong Tel: (+852) 25799398 26930177 Fax: (+852) 25659537 26027159



Tuesday, 05 August, 2014, 4:29am Comment>Letters



A general view of Shek Kwu Chau

I wish to correct misunderstandings in the letter by Tom Yam ("Incinerator's hefty price tag defies guidelines and sense", July 3), the Lai See piece by Howard Winn ("Incinerator proposal goes to Legco for funding", July 4), and Louise Preston's letter ("Unimpressed by top official's concerns", July 24).

On the siting of the integrated waste management facility Yam raised, we considered it important to achieve a more balanced distribution of waste facilities and more efficient interface with the refuse transfer network, hence the choice of an artificial island site near Shek Kwu Chau.

The waste management facility near Shek Kwu Chau has been approved under various ordinances. Going for another site now will not be quicker as it will take considerable time to get the necessary approvals.

Also, Tsang Tsui is already the site for the sludge treatment facility recently built with a maximum capacity for incinerating 2,000 tonnes of sludge per day.

Regarding the contractual model, Yam may be unaware that the design-build-operate model is a well-proven and cost-effective contractual model used in Hong Kong for all major waste facilities over the past 20 years. There is no reason to believe that this model would not work for the waste-to-energy plant.

Moreover, he wrongly used the money-of-the-day figure when calculating the unit capital cost of Hong Kong's plant.

Based on the current price of **about HK\$12.7 billion**, the unit capital cost of the integrated waste management facility is about HK\$4.25 million per tonne and is comparable to that of the Dutch plant, even when the additional works, such as reclamation and other advanced facilities, are included.

8/F Eastwood Centre - 5, A Kung Ngam Village Road - Shaukeiwan, Hong Kong

Tel: (+852) 25799398 26930177 Fax: (+852) 25659537 26027159 Website: www.cleartheair.org.hk chair@cleartheair.org.hk



The unit capital cost is also comparable to that of the new 1,100 tonnes per day waste-to-energy plant being built at Amagar Bakke in Denmark with similar performance requirements, which is about HK\$4.27 million per tonne.

The plasma gasification plants mentioned by Winn are relatively small in scale with a very limited performance track record. Our recent visit with legislators to Europe in March reaffirmed this observation.

It would take several years of operation before the effectiveness and efficacy of such gasification plants can be evaluated.

The modern 3,000 tonnes per day integrated waste management facility will adopt proven, cost-effective technology that can reliably safeguard public health and meet the most stringent environmental standards on a par with other similar modern facilities in the world.

Elvis W. K. Au, assistant director of environmental protection

Source URL (retrieved on Aug 5th 2014, 7:20am):

 $\underline{\text{http://www.scmp.com/comment/letters/article/1566561/incinerator-will-adopt-proven}}_{-cost-effective-technology-island}$