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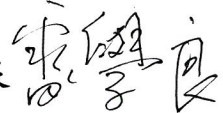
薛女士：

立法會財務委員會

有關有機資源回收中心第二期

有關朱凱迪議員於2019年5月16日的來信，要求政府就
有機資源回收中心第二期提交補充資料，有關文件載於附件以
供議員參考。

環境保護署署長

(雷學良  代行)

2019年5月22日

**Supplementary information
on the Organic Resources Recovery Centre Phase 2 requested by
Hon CHU Hoi-dick in his letter of 16 May 2019**

1.	The Government to provide the full report of the Feasibility Study for the Organic Resources Recovery Centre Phase 1.												
Reply:	We have deposited a hardcopy of the Organic Resources Recovery Centre (ORRC) Phase 1 (O • PARK1) Feasibility Study Report (with the parts containing commercially sensitive content and confidential information redacted) at the Legislative Council Secretariat for Members' review.												
2.	The Government to provide the breakdown (in table form) of the estimated annual demand of over 32 000 tonnes compost in Hong Kong based on the Feasibility Study for the Organic Resources Recovery Centre Phase 1 (e.g. the demand of government departments, the public works involved, and the demand of farm use, etc.).												
	<p>Based on the Feasibility Study for the O • PARK1, the breakdown of the estimated annual demand of compost in Hong Kong is shown below :</p> <table><tr><th>Category</th><th>Estimated Demand of Compost in Hong Kong (tonnes per year)</th></tr><tr><td>Government Departments</td><td>17,500</td></tr><tr><td>Farms</td><td>3,000</td></tr><tr><td>Non-Governmental Organisations</td><td>100</td></tr><tr><td>Others (Schools, Landscaping Contractors etc.)</td><td>11,600</td></tr><tr><td>Total</td><td>32,200</td></tr></table>	Category	Estimated Demand of Compost in Hong Kong (tonnes per year)	Government Departments	17,500	Farms	3,000	Non-Governmental Organisations	100	Others (Schools, Landscaping Contractors etc.)	11,600	Total	32,200
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Others (Schools, Landscaping Contractors etc.)	11,600												
Total	32,200												
3.	According to the findings of the Feasibility Study for the Organic Resources Recovery Centre Phase 1, the estimated annual demand of compost in Hong Kong is over 32 000 tonnes, but the estimated annual production of compost from the Organic Resources Recovery Centre Phases 1 and 2 is 6 500 tonnes and 10 000 tonnes												

	respectively. There is a shortfall of 15 500 tonnes of compost to meet the local demand. The Government shall explain the rationale why the Organic Resources Recovery Centre Phase 3 may not need composting facilities.
Reply:	<p>The treatment technologies adopted by the O • PARK1 and the ORRC Phase 2 (ORRC2) (i.e. anaerobic digestion and composting) are on par with the treatment methods for organic waste currently adopted internationally, and in line with the policy on sustainable use of resources, turning waste into energy and reduction of landfill disposal as stated in the “Hong Kong: Blueprint for Sustainable Use of Resources 2013-2022”.</p> <p>We have estimated that the annual demand of compost in Hong Kong is about 30 000 tonnes, of which about 10% (i.e. about 3 000 tonnes) is the demand for agricultural use, and the remaining demand is for landscaping. The O • PARK1 and ORRC2 will produce a total of about 17 000 tonnes compost per year, which will meet the “Compost and Soil Conditioner Quality Standards – 2005” formulated by the Hong Kong Organic Resource Centre¹ (HKORC), for use by local farms and community farming. They could satisfy the compost demand for agricultural use. In addition, we have been taking forward the collection of yard waste generated from government departments (e.g. grass clippings, leaves and tree trunks etc. arising from landscaping and vegetation maintenance works), and examining the conversion of these organic resources into biomass products (e.g. mulch for planting purposes and bio-charcoal, etc.). On one hand, this can meet the local demand from landscaping on soil quality improvement. On the other hand, this provides a feasible outlet for local yard waste.</p> <p>Hence, according to our current plan, there is no need for the ORRC Phase 3 (ORRC3) to have composting facilities. We will examine, in the feasibility study of the ORRC3, proposals for treating food waste and the residue from the anaerobic digestion, and seek new breakthroughs with a view to achieving a suitable, the most effective and economical proposal.</p>

¹ The Hong Kong Organic Resource Centre (HKORC) is the first local non-profit organisation under the Agricultural Development Fund of Vegetable Marketing Organization to facilitate the development of organic agriculture in Hong Kong. The Hong Kong Organic Resource Centre Certification Limited, managed by the HKORC, is the only independent incorporated third party organic certification agent in Hong Kong, providing certification services for the agriculture, fisheries and processing sector in Hong Kong. It formulates Organic Production, Aquaculture and Processing Standards, and provides professional organic certification services. (http://www.hkorc.org/?page_id=127&lang=en)

4.	The Government to provide information, since the operation of the Organic Resources Recovery Centre Phase 1, on the average monthly amount of food waste treated, monthly amount of compost produced and the distribution of compost (in tonnes) for use by different government departments, organisations, farms, etc.
Reply:	<p>The O • PARK1 was commissioned in July 2018. It is necessary to gradually increase the amount of food waste treated initially to ensure that there is sufficient time for the micro-organisms, which degrade food waste in the anaerobic digestion tanks, to grow steadily. As of April 2019, a total of 27 000 tonnes of food waste have been collected from about 190 commercial and industrial establishments. The average amount of food waste treated is about 2 700 tonnes per month.</p> <p>Regarding compost production, the start-up of the anaerobic digestion facilities needs to firstly employ sludge of the sewage treatment works to help expedite the cultivation of suitable bacteria and micro-organisms in the anaerobic digestion tanks, so as to enable faster biodegradation. As a result, the compost produced initially contains heavy metals arising from the sludge, which is not suitable for use. In addition, it takes about two months from the collection of food waste at source to compost production. Hence, the O • PARK1 has produced 640 tonnes of usable compost so far, which was mainly used for landscaping of the infrastructure projects. Up to now, the O • PARK1 has distributed a total of 440 tonnes compost to the Leisure and Cultural Services Department, 5 landscaping companies and a school.</p>
5.	The quality of compost is very important to the agricultural application. Has the Government consulted the agricultural sector during the Organic Resources Recovery Centre Phases 1 and 2? Will the Government start a dialogue with the farmers to seek their views on how to improve the quality of the compost for the agricultural needs? Will the interested farmers be provided with compost free of charge with free delivery ? How many tonnes of compost can each farm request for?
Reply:	<p>In October 2018, the Environmental Protection Department met with the representatives of the Federation of Vegetable Marketing Co-operative Societies Ltd. (FVMCS) and the Vegetable Marketing Organization (VMO) through the arrangement by the Agriculture, Fisheries and Conservation Department, so as to understand the agricultural sector's requirements on the quality and packaging of organic compost. We have committed to arranging briefings to explain the compost quality for the local farmers and providing them with a</p>

	<p>certain amount of free compost for trial after the compost of the O • PARK1 has acquired the organic certification issued by the Hong Kong Organic Resource Centre (HKORC). FVMCS has also agreed to have the compost of the O • PARK1 consigned at their store for sale. We will continue to liaise with the FVMCS and the VMO to gather the feedback of the trade on the compost quality.</p>
6.	<p>According to clause 7.2.1 of the Hong Kong Organic Resource Centre (HKORC)’s standard, although item 18 “Compost made from food waste” is under the “Allowed” category, the remark states that the food waste “Must be free from genetically modified organisms and its derivatives” ^{Note 1}. Has the Government obtained confirmation from the organic certification organisation, such as Prof. Jonathan Wong of the HKORC, that the compost from the concerned organic resources recovery centre can be used by the certified organic farmers? If these farmers cannot use the compost, what will be the reduction in the demand of compost in Hong Kong? Will the HKORC or its operator monitor the quality of compost? If so, what are the monitoring details (such as the frequency of monitoring) ?</p> <p>Note 1 http://www.hkorc-cert.org/download_file.php?op=download&id=229 (Organic Production, Aquaculture and Processing Standard (IFOAM Accredited Version), Hong Kong Organic Resource Centre Certification Limited)</p>
Reply:	<p>The contractor of the O • PARK1 is required to take samples from each batch of the compost produced and deliver the samples to a laboratory accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) for testing in accordance with the required compost quality standards so as to ensure that the quality of the compost meets the requirements. At present, the compost product has met the requirements for landscaping application. The contractor is making an effort to upgrade the quality of the compost with a view to achieving the required quality for organic farming as soon as possible.</p>

Environmental Protection Department
May 2019