Legislative Council Panel on Development

Enhancing Land Supply Strategy:
Reclamation outside Victoria Harbour and Rock Cavern Development -
Stage 1 Public Engagement

PURPOSE

This paper informs Members of the latest development of the technical studies and the public engagement exercise for enhancing land supply by reclamation outside Victoria Harbour and rock cavern development.

BACKGROUND

2. In May 2011, we briefed Members on the Administration’s plan¹ to launch a search for potential reclamation sites, identify suitable existing government facilities for relocating to rock caverns, and conduct relevant technical assessments. In conjunction with these technical studies, a two-stage public engagement (PE) exercise will be conducted to initiate public discussions with a view to gauging the public’s views on the two land supply options: reclamation outside Victoria Harbour and rock cavern development.

3. Members expressed support to commence the technical studies and the PE exercise, and advised that the PE exercise should be conducted in a knowledge-based manner, with sufficient background information including difficulties in the land development process and the pros and cons of the two options disseminated to the public.

LATEST DEVELOPMENT

4. The Civil Engineering and Development Department (CEDD) commenced a consultancy study on site search cum public engagement in July 2011. The study will span 21 months for completion in early 2013. The Stage 1 PE exercise was formally launched on 10 November 2011 and will last until 29 February 2012.

¹ LC Paper No. CB(1)2205/10-11(05)
5. On the search for reclamation sites, we have developed an inventory of site constraints in consultation with relevant government departments. This inventory helps identify the “no-go” areas for reclamation and areas that pose serious constraints and hence facilitates the site search study. As regards cavern development, we are reviewing the suitability of relocating certain public facilities to caverns. With the public’s input in the on-going Stage 1 PE, we are working towards the target of identifying a longlist of 25 possible reclamation sites and 20 possible cavern development sites.

6. Actually, before the PE exercise, we briefed the Town Planning Board, the Land and Development Advisory Committee and its Planning Sub-committee in July and August 2011, seeking their initial views on the initiatives, our proposed studies and the PE exercise. We also advised the 18 District Councils of our planned studies and the PE exercise by means of an information paper in July 2011. In August and September 2011, we convened four focus group meetings with relevant think tanks, business associations and green groups, and consulted concerned individuals from the academics and professional institutions for their initial views and concerns on the proposal and the site selected criteria.

7. The views collected during the pre-engagement consultations are summarized at Annex 1. In sum, the consultees were in general supportive of the initiative of relocating suitable public facilities to rock caverns, and the Government should endeavour to expedite the relocation and project delivery programmes. As regards reclamation, potential impact on marine ecology and the preservation of natural shoreline remained the main concerns. We will explore opportunities to enhance the marine habitat by adopting innovative reclamation designs and limiting encroachment upon natural shorelines.

8. In the 2011-12 Policy Address announced by the Chief Executive on 12 October 2011, reclamation outside Victoria Harbour and rock cavern development are identified as two of the six innovative measures\(^2\) to expand Hong Kong’s land resources. The Chief Executive also promulgated the policy of land development and accumulation to build up a land reserve.

**PUBLIC ENGAGEMENT**

9. The objective of the Stage 1 PE is to arouse the public and solicit their views on the feasible ways of increasing land supply, the guiding principles and the site selection criteria. For well-received development proposal identified during

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\(^2\) The other measures are: release of industrial land for non-industrial use, use of green belt sites, review of “Government, Institution or Community” sites and conversion of agricultural land.
this stage, we may advance detailed studies for the proposed development so as to expedite its implementation. Based on the outcome of the Stage 1 PE and the established site selection criteria, we will evaluate with the public the proposed list of potential sites in the Stage 2 PE, tentatively in the third quarter of 2012.

10. We held a kick-off ceremony for the PE exercise, together with the first leg of a roving exhibition, on 10 November 2011. To facilitate informed discussions, a PE Digest providing information on the background and key issues is prepared for dissemination to the public and appended at Annex 2 for Members’ reference. To reach a wide audience, a nine-minute video has been produced (a disk containing the video is enclosed for Members’ viewing). A wide range of PE activities, which are listed on page 22 of the PE Digest, have been scheduled for November 2011 to February 2012.

Key Issues

11. We are engaging the public to discuss the following key issues on enhancing the land supply strategy:

(a) **Land supply in line with Progressive Development**\(^3\) – To underpin sustainable development, it is necessary to enhance our land supply strategy by devising a good mix of supply options and building up a sufficiently large land reserve to achieve a balance among social, environment and economic needs. Reclamation outside Victoria Harbour and rock cavern development are strategic ways to achieve the good mix of supply options and create the land reserve. The enhanced land supply strategy can also better meet the demand of progressive development advocated by the Chief Executive in his 2007-08 Policy Address, i.e. an overall progress with economic, cultural, social and environmental benefits.

(b) **Land reserve ensuring timely supply** – The policy of maintaining a land reserve as announced by the Chief Executive in his 2011-12 Policy Address can effectively address the short-term fluctuations of land demand, and ensure a timely and steady supply. Our aim is to ensure an annual supply of land for an average of about 40 000 residential units of various types. Even when demand for land declines, land development will continue. The newly developed land will be kept in the Government’s land reserve and made available when appropriate. Land reserve would also allow us to be more responsive to special land needs arising from unexpected economic and technological development. We will explore with the public

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\(^3\) In his 2007-08 Policy Address, the Chief Executive said “By Progressive Development, I mean overall progress rather than economic development alone. Apart from economic benefits, we should strive for benefits to culture, the society and the environment ...... a sustainable, balanced and diversified development.”
different forms of land reserve.

(c) **Reclamation outside Victoria Harbour serving other purposes** – Cities like Hong Kong generate large amounts of public fill and contaminated sediment in construction activities and fairway maintenance. Existing public fill banks and contaminated mud disposal areas are expected to be full by 2015 to 2020 and 2017 respectively. Apart from increasing land supply, reclamation outside Victoria Harbour can offer the benefits of re-using surplus public fill and handling contaminated sediments in an environmentally-friendly manner. This can avoid cross-boundary disposal of such materials which involves additional cost and carbon emission in the delivery process.

We observe that the public are mindful of the environmental impact arising from reclamation. We will advocate cutting-edge technologies including reclamation without the dredging of marine mud, re-establishing natural marine habitats by eco-shoreline, and various environmental mitigation measures during the construction stage.

(d) **Rock cavern development** – About 64% of the land in Hong Kong is well-suited for rock cavern development, which is a valuable land resource particularly near or in the urban areas. To realize this valuable asset, more innovative use of caverns will be actively explored to reprovision existing public facilities and release such sites for housing and other uses. We note that some members of the public are concerned about the long delivery time and cost effectiveness of rock cavern development. We plan to embark on feasibility studies on relocation of the Sha Tin sewage treatment works, Mount Davis fresh water primary service reservoir and Kennedy Town fresh water service reservoir to caverns, which were well-received in the pre-PE consultations, in parallel with the Stage 2 PE exercise. Also, we will evaluate tangible economic costs and benefits as well as the intangible social and environmental costs and benefits of the development proposals in the feasibility studies.

**Guiding Principles and Initial Site Selection Criteria**

12. To build a sustainable future, we will strive to protect the prospect of future generations while meeting our own needs and strive for a balance among social, environmental and economic needs. “Social harmony and benefits”, “Enhanced environmental performance” and “Economic efficiency and practicality” are set as our guiding principles which provide a framework for developing the site selection criteria. They help ensure that the set of site selection criteria can meet our ultimate goal of progressive development.
13. The set of site selection criteria is a tool for screening and selecting suitable sites for reclamation and cavern development. It should be comprehensive, reasonable and prudently-formulated and should be able to reflect the core values of the community as a whole. The sites selected on the basis of these selection criteria should be able to meet the needs and aspirations of the public.

14. Following the pre-engagement consultations and with the benefit of a value management workshop\(^4\), the CEDD has developed a set of initial site selection criteria for reclamation and rock cavern development under the three guiding principles for discussion during the Stage 1 PE. The initial site selection criteria are tabulated below -

<table>
<thead>
<tr>
<th>Guiding Principles</th>
<th>Reclamation outside Victoria Harbour</th>
<th>Relocating public facilities into cavern</th>
</tr>
</thead>
</table>
| Social harmony and benefits | • Impact on local community  
• Site location and accessibility  
• Meeting local needs | • Social benefits at the releasing site upon relocation of existing facilities  
• Social impact at the cavern development site |
| Enhanced environmental performance | • Environmental impacts  
• Environmental benefits | • Environmental benefits in the vicinity of the releasing site upon relocation of existing facilities  
• Environmental impact at the cavern development site |
| Economic efficiency and practicality | • Planning flexibility  
• Engineering feasibility  
• Cost effectiveness | • Engineering feasibility  
• Cost effectiveness  
• Specific requirements of facility  
• Suitability of relocation based on existing facility status |

\(^4\) The purpose of the value management workshop is to identify opportunities to improve the value of the project. It involves information gathering, analysis and synthesis in relation to the timeline, requirements and functions of the project.
15. During the Stage 1 PE, we will gather the views of the public on the initial site selection criteria and their relative importance. Views collected will be used in finalizing and prioritizing these criteria. The finalized set of site selection criteria, combined with the findings of the technical studies on the performance of each site, will be used for assessing the suitability of a reclamation site or whether a government facility is suitable for relocation to rock cavern.

WAY FORWARD

16. We will conduct the Stage 1 PE with a wide range of activities including telephone polls, roving exhibitions, focus group meetings, topical discussions and public forums. Members of the public are welcomed to join our activities or express their views by mail or through the project website before 29 February 2012.

17. We will identify potential sites taking account of the ‘no-go” areas, seriously constrained sites, and views of the public collected during the Stage 1 PE. The identified sites in the longlist mentioned in paragraph 5 above will be subject to a broad technical assessment to ascertain their technical, environmental and social performance for shortlisting in accordance with the established site selection criteria. We target to formulate a shortlist of 10 potential reclamation sites and 8 cavern development sites for consideration in the Stage 2 PE and further detailed engineering studies.

18. We plan to embark on the following four consultancy studies and seek the support of the Members in early to mid 2012 tentatively -

(a) feasibility study on relocation of Sha Tin sewage treatment works to caverns;

(b) feasibility study on relocation of Mount Davis fresh water primary service reservoir and Kennedy Town fresh water service reservoir to caverns;

(c) study on the long-term strategy for cavern development, which seeks to prepare cavern master plans to reserve strategic cavern areas, work out a systematic relocation programme for suitable government facilities, and formulate policy guidelines to facilitate cavern development for both public and private sectors; and

(d) planning and engineering studies on reclamation sites, stage 1, which will cover a maximum of four reclamation sites well received during the PE.
ADVICE SOUGHT

19. Members are invited to note the latest development of the technical study and the public engagement, the key issues and proposed initial site selection criteria for reclamation outside Victoria Harbour and rock cavern development, and the way forward for the initiatives.

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Development Bureau
November 2011
A summary of the views collected during the pre-engagement consultations from July to September 2011

Town Planning Board

The Town Planning Board generally supported the study to explore different options of increasing land supply in the long term and the land reserve concept at the meeting on 15 July 2011. The following views were expressed:

- Reclamation outside Victoria Harbour can be a good means of increasing land supply but there might be negative impact on marine ecology and objections from the green groups and the local residents.
- There is good potential to better utilize cavern development in Hong Kong. Nonetheless, the problems encountered in overseas cavern developments, taking into account the local geotechnical and weather conditions, should be studied.
- It is worth considering the relocation of Sha Tin Sewage Treatment Works as it would release a large piece of waterfront area and remove the existing facility that has created odour nuisance to the neighbourhood.

Land and Development Advisory Committee (LDAC)

The LDAC at the meeting on 14 July 2011 expressed the following views and expectation on the forthcoming public engagement exercise:

- The community should consider the necessity of increasing land supply for future development and improving people’s living environment. To help discussions and reaching consensus, the public engagement exercise should demonstrate the need of additional land, the Government’s land supply strategy, the effects and constraints of other policy initiatives in land supply and the need of reclamation and rock cavern development.
- The public engagement exercise should highlight the new opportunities that reclamation would bring to Hong Kong, such as environmental benefits and sustainable ecological development. Meanwhile, reclamation sites having minimal impact on marine ecology and with supporting infrastructure should be accorded with priority.
- It may be more acceptable to the public if the community is well aware of the proposed use of the reclamation sites and the sites to be released from

Annex 1
relocation of government facilities.

Land and Development Advisory Committee – Planning Sub-committee

The Planning Sub-Committee of the LDAC at the meeting on 2 August 2011 expressed the following views on the options of reclamation outside Victoria Harbour and rock cavern development, and the forthcoming public engagement exercise:

- Cavern is a creative and viable option for releasing land in the urban area. Individual development proposals should be supported by cost-benefit analysis to justify the high cost in development. The future uses of the released land after relocating the existing facilities to cavern should be carefully planned to serve the community and enhance the quality of the living environment.

- Reclamation appears to be a sensible alternative in order to preserve the country parks. Nonetheless, natural coastlines of high conservation value and sites of high ecological value should be avoided.

- More information, including purposes, justification and cost of the two options should be included in the public engagement exercise.

In addition, there were opinions that development of the New Territories and redevelopment through the Urban Renewal Authority should continue to meet the short-term demand.

Focus Groups and concerned individuals from the academics and professional institutions

A total of four focus group meetings with 46 participants from think tanks, business associations, and green groups were conducted on 30 & 31 August 2011 and 2 & 5 September 2011. From August to October 2011, we also visited and discussed with 16 persons from the academics and professional institutions who had expressed views on the subject.

The need of increasing land supply was generally agreeable to the participants for meeting population growth, improving the living quality and supporting the economic development of Hong Kong. However, more information should be provided during the public engagement exercise to decide on the proper means
of land production. Major views collected are as follows:

- The need of additional land should be justified by quantitative data including annual demand and supply of land in the past and within the planning horizon.
- The Government should take priority to rezone under-utilized industrial sites and agricultural land in the New Territories which are currently used for industrial purpose or temporary storage, rather than reclamation.
- There were divergent views on the release of some areas of the country parks for housing and other uses.
- While cost factors remain to be the major concern for rock cavern development, the social benefits should be taken into account.
- The Administration should encourage the re-use of surplus public fill and contaminated sediment in infrastructure projects and should not treat reclamation as a simple way out for handling these surplus materials.
Enhancing Land Supply Strategy:
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Stage 1 Public Engagement

Public Engagement Digest and Video
Invitation
誠邀您的參與

Land is one of the most valuable assets of Hong Kong which touches every aspect of our daily life. It is becoming ever more challenging to ensure an adequate and steady land supply. To meet the challenges, the Government plans to enhance the land supply strategy.

土地是香港最宝贵的资产之一，與我們日常生活的各個方面密不可分。土地供應越來越具挑戰性。為應對這些挑戰，政府計劃改善土地供應策略。

You are cordially invited to participate in the Stage 1 Public Engagement exercise and express your views on enhancing the land supply strategy, particularly on reclamation outside Victoria Harbour and rock cavern development as mentioned in the Chief Executive’s 2011-12 Policy Address.

誠摯邀請您積極參與第一期公眾參與活動，就優化土
地供應策略，特別是維港以外填海及岩洞發展等項目，
踴躍提出意見。
Meeting Our Needs — Building a Sustainable Future
展望將來 未雨綢繆

Our community shares a common vision of sustainable development: meeting our own needs without damaging the prospects of future generations; striving for a balance among social, environmental and economic needs.

The realization of this vision calls for adequate usable land. It has been the Government’s long-standing policy to work with a range of land supply options. But there have been different challenges in supplying land, particularly over recent years. Meanwhile, population growth, rising aspiration for quality living environment and economic development all add to the need and uncertainties surrounding the need for more land resource. To underpin the sustainable development of Hong Kong, it is therefore necessary to enhance our land supply strategy by devising a good mix of supply options and building up a sufficiently large land reserve to achieve a balance among social, environmental and economic needs.

可持續發展是社會的共同願景 — 我們在滿足自己的需要時不損害子孫後代的福祉；並力求平衡社會、環境和經濟所需。

要實現這個願景需要足夠的可用土地，政府一直採用各種土地供應模式，但近年也面臨不同的挑戰。同時，人口增長、改善生活環境的需求及經濟發展，對土地的需求不斷增加及改變。因此，為鞏固香港的可持續發展，我們必須優化土地供應策略，制定良性的土地模式組合及累積一定的土地儲備，以平衡社會、環境和經濟發展的需要。

Population Growth 人口增長

The population is estimated to grow by 25%, reaching 8.9 million by 2039; the number of households will increase almost by 30% to 3.1 million during the same period.

至2039年，香港人口估計會有25%的增長，達890萬；在同時期，戶數目也會有接近3成的增幅至310萬戶。

Quality of Life 生活質素

It is the public’s aspiration to improve the living environment by lowering building density, having more open space, conserving the natural environment, as well as preserving culture and heritage. More land is needed if such aspiration is to be realized.

改善生活環境是大眾的期望，包括降低建築密度、增加活動空間、保護自然環境，以及保存文化和文物。如果要實現這些期望，也需要更多土地供應。

Economic Development 經濟發展

The Four Pillar Industries, namely financial services, trading and logistics, tourism, and professional services have been the drivers of Hong Kong’s economic growth and jobs creation. To enhance our competitiveness, adequate land should be provided for infrastructure and business use. The six industries actively promoted by the Government, namely medical services, environmental industries, testing and certification services, education services, innovation and technology, and cultural and creative industries, also require land for development.

四大支柱行業，即金融、貿易及物流、旅遊，以及專業服務一直是香港經濟增長動力及工作職位來源。為提升香港的競爭力，我們需要提供足夠商業用地及其他土地進行基礎建設。政府正積極推動的六大產業包括醫療、環保、檢測及認證、教育、創新及科技，以及文化及創意，亦需要土地供應配合發展。
Existing Land Supply Options

種現有土地供應模式

- Rezoning Land 更改土地用途
- Land Resumption 收地
- Rock Cavern Development 發展岩庫

Rezone underutilized sites, e.g. industrial or "Government, Institution or Community" sites, and lands that no longer perform their original functions, e.g. deserted green belt areas or agricultural land for housing or other uses.

Key limitation / challenge:
- Involving private owners and developers, or different Government departments, it requires a longer process. Actual development hinges on market response. Timing of development is less predictable.

- Redevelopment the older urban areas, e.g. Kowloon Tong, Tsuen Wan, Wan Chai, or individual buildings through re-planning and re-building to improve the local environment and better utilize the land.

Key limitation / challenge:
- Private owners and developers take the leading role. Comparing with other options implemented by the Government, it is less predictable.

Each of these options has its own limitations and challenges.

主要限制/挑戰:
- 私有業主和發展商，需不同政府部門，及需要發展程序，實際發展情況取決市場情況，難掌握發展時間。

主要限制/挑戰:
- 業主和私營發展商主導開發過程，相比其他由政府執行的土地開發模式，這方法的供應較難預測。

Reuse of Ex-quarry Sites 重用前石礦場
Reclamation 填海
Redevelopment 重建

market driven, unpredictable supply 市場驅動，不可預測供應
Land Resumption 收地

Exercise statutory power to compulsorily take over private lands for public purposes. For instance, private agricultural land in the New Territories has been resumed for developing new towns and infrastructure.

Key limitations / challenges:
- It may cause local resentment if residents wish to maintain their rural lifestyle and are not satisfied with compensation or rehousing arrangements.
- The land acquired can only be used for designated purposes, resulting in low flexibility in land use.

Resumption 收地
- local disruption 影響居民

Reclamation 填海

Create land over the foreshore or sea-bed. Most new towns and the Hong Kong International Airport are built on reclaimed land. Reclamation and leveling mountain slopes have been the major means to create usable land in Hong Kong for more than a century.

Key limitations / challenge:
- Emphasis is to be placed on reducing and mitigating impact on marine ecology.
- 主要影響 / 扭轉：
  - 須注重減少和緩和對海洋生態的影響。

Reclamation 填海
- environmental issues 環保考慮

Rock Cavern Development 發展岩洞

Place new facilities inside caverns, e.g. Island West Transfer Station, and relocate suitable existing government facilities, e.g. Sha Tin Sewage Treatment Works, into rock cavern to release such sites for housing or other uses.

Key limitation / challenge:
- As the public may not readily accept daily activities inside cavern, this option may not be applicable to many uses.
- 主要影響 / 扭轉：
  - 市民可能不容易接受在岩洞內進行日常活動，很多用作未必適合置於岩洞內。

Reclaim Rock cavern Development 發展岩洞
- public perception 公眾觀感

Reuse of Ex-quarry Sites 重用前石礦場

Rehabilitate the platforms formed in ex-quarry sites, e.g. Anderson Road Quarry, as a source of new land.

Key limitation / challenge:
- This type of land supply is limited, and can only be available upon quarry closure.
- 主要影響 / 扭轉：
  - 只可在已關閉的前石礦場，因此以這種方式提供的土地數量有限。

Reuse of Ex-quarry Sites 重用前石礦場
- limited supply 數量有限
Land Supply in Line with Progressive Development

flexible land supply used to meet Hong Kong's needs

A portfolio of land supply options with enough flexibility in the past had enabled considerable economic and social growth of Hong Kong.

A good mix of land supply options can also better meet the demand of the "Progressive Development" advocated by the Chief Executive in his 2007/08 Policy Address.

"By 'Progressive Development', I mean overall progress rather than economic development alone. Apart from economic benefits, we should strive for benefits to culture, the society and the environment... sustainable, balanced and diversified development," the Chief Executive said.

In recent years...

Some challenges in land development have hindered the progress and realization of our strategy and target in land supply. These challenges must be overcome if we are to implement the concept of 'progressive development'.

The strong public aspiration of protecting and preserving Victoria Harbour as a special public asset and a natural heritage of Hong Kong people is enshrined in the Protection of the Harbour Ordinance. To explore the balance among economic development, environmental protection and natural heritage conservation, the Government has been very cautious in pursuing further reclamation in recent years. Land created by reclamation has significantly declined, from about 500 to 700 hectares every five years to 84 hectares in 2005 to 2009. In order to realize progressive development, we need to consider reclamation outside Victoria Harbour to generate more land.

Reclamation from 1985 to 2009

From 1985 to 2009, the area of reclaimed land was significantly reduced, from about 500 to 700 hectares every five years to 84 hectares in 2005 to 2009. This cautious approach is necessary in order to protect and preserve the natural heritage of Victoria Harbour.

Flexible land supply is crucial for sustainable development.

In 2007/08, a good mix of land supply options was advocated by the Chief Executive to achieve overall progress rather than economic development alone. This includes benefits to culture, society, and the environment.

The Protection of the Harbour Ordinance enshrines the public aspiration to protect and preserve Victoria Harbour as a special public asset and natural heritage of Hong Kong.

Significant decline in reclamation efforts has been observed, with reclamation areas decreasing from about 500 to 700 hectares every five years to 84 hectares in 2005 to 2009. This is necessary to balance economic development, environmental protection, and natural heritage conservation.
**Challenges Faced by Other Options**

It is also challenging to make extensive use of other land supply options such as rezoning, redevelopment and land resumption. Rising public concerns on natural and heritage conservation, and disputes over compensation and clearance for developments in the New Territories are just some of the issues. The usable land that could be obtained through these options also dropped significantly in the past five years. Land provided by rezoning existing sites and rock cavern development was negligible.

**Changing Demand**

Population forecasts, especially long-term forecasts, are bound to be adjusted as social and economic circumstances change, resulting in uncertainties in land demand.

People’s expectation of living quality also changes when social and economic circumstances change, adding more uncertainties to land demand.

The fast changing market conditions have also caused considerable uncertainties in land demand for economic development.

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**Land supplied by different options in the past decade**

<table>
<thead>
<tr>
<th>Land supplied for different options (hectares)</th>
<th>2001-2005</th>
<th>2006-2010</th>
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<tbody>
<tr>
<td>Reclamation 填海</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rock cavern 土地改造</td>
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<td></td>
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<tr>
<td>Land resumption 土地复垦</td>
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<tr>
<td>Redevelopment 旧区重建</td>
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1. For “Reclamation”, land formed by reclamating eligible areas for private uses. For information about about 100 ha to be redeveloped with around HK$500 per sq m at a cost of HK$5 billion.
2. “Reclaming land” covers reclamining of non-development areas for zones of the Sai Kung Peninsula or development areas, or land required for development, secondarily to development areas.
3. Land resumption: land required for implementation of public works projects excluding railway projects. (Note: Data on ‘2010-2011’ are still provisional and not final.

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**3Rs**

**More flexibility and resilience in land supply strategy**

Given the limitations in land development and the changing demand in land resources, we need a more flexible and resilient mix of land supply options to respond to future challenges and opportunities. Suppling land and creating a land Reserve through Reclamation outside Victoria Harbour and developing Rock cavern is a strategic way to achieve our goal.

**更靈活及具彈性的土地供應策略**

由於土地開發上的限制及土地需求變化不斷改變。我們需要一個更靈活及具彈性的土地供應策略機制，以應對未來的挑戰和機遇。透過在港島以外或發展岩洞去供應土地及建立土地儲備，便可有策略地實現目標。

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**不断变化的需求**

随著社会和经济状况的变化，人口的减少，尤其长短期预测，必然需要有预测调整，令土地需求有不确定性。

市民对生活质素期望也随著社会和经济状况的变化而改变，增强了土地需求的不确定性。

市场状况瞬息万变，为经济发展的需要常常用到社会有相当大的不确定性。

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Land Reserve Ensuring Timely Supply

土地儲備 確保適時供應

A target was set in the Chief Executive’s 2011-12 Policy Address to expand our land resources and to build up a land reserve to stabilize land supply.

“Our aim is to ensure an annual supply of land for an average of about 40,000 residential units of various types. Even when demand for land declines, land development will continue. The newly developed land will be kept in the Government’s land reserve and made available when appropriate,” the Chief Executive said.

Potential sites are identified with the necessary studies and design work completed. Actual construction works can commence immediately when the need is confirmed.

Potential sites that fulfill the site selection criteria are reserved. Further studies to ascertain their feasibility and design works will only be carried out after the need is established.

Land Reserve can be established in three forms:

1. Land is formed first. It can be used readily when the needs arise. The land can be allocated for temporary use before a permanent land use is established.

2. Potential sites are identified with the necessary studies and design work completed. Actual construction works can commence immediately when the need is confirmed.

3. Potential sites that fulfill the site selection criteria are reserved. Further studies to ascertain their feasibility and design works will only be carried out after the need is established.
Reclamation at suitable location outside Victoria Harbour on an appropriate scale can be a possible option to increase land supply and create a land reserve. This option is a sustainable solution for the handling of surplus public fill and contaminated sediment at the same time, achieving “triple benefits”.

Reclamation has been an important source of creating usable land in Hong Kong for more than a century. As of early 2011, about 6% of land in Hong Kong (6,824 hectares) came from reclamation.

Technologies for reclamation nowadays have been enhanced which help reduce the impact on the marine environment. For instance, dredging marine mud from the seabed is not necessary in some new designs. Re-establishment of natural marine habitats by measures such as eco-shoreline can also be explored in the design.

Public fill is the inert portion of the construction and demolition materials generated from construction activities in the building and civil engineering sector. Construction activities generate about 6 to 7 million tonnes of surplus public fill each year.

About 2 to 2.5 million m$^3$ of contaminated sediment is produced annually by dredging of harbour fairways and other marine works.

A Confined Disposal Facility (CDF) is a form of nearshore reclamation that stores contaminated sediment underground in a controlled environment. After CDFs are filled, they are covered with public fill for future land development. This method is widely used overseas such as the US and Singapore.

Public Fill for Different Reclamation

<table>
<thead>
<tr>
<th>Category</th>
<th>Public Fill (per tonne)</th>
<th>Local Reclamation (per tonne)</th>
<th>Reclamation in Taishan (per tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Fill</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handling cost (per tonne)</td>
<td>$43</td>
<td>$70</td>
<td></td>
</tr>
<tr>
<td>Additional delivery distance</td>
<td></td>
<td>- 110 km 公里</td>
<td></td>
</tr>
<tr>
<td>Additional diesel consumption per day</td>
<td></td>
<td>- 10,000 litres 公升</td>
<td></td>
</tr>
<tr>
<td>Additional carbon emission per day</td>
<td></td>
<td>- 50 tonnes 公噸</td>
<td></td>
</tr>
</tbody>
</table>
Previous studies have shown that 64% of Hong Kong is particularly well-suited for rock cavern development. We have been looking for opportunities to make use of this unique geological asset.

In the mid-1990s, a few purpose-built rock caverns were constructed to accommodate government facilities to meet the needs of the community, such as the Island West Refuse Transfer Station and Stanley Sewage Treatment Works. Using caverns to house MTR stations such as the Tai Koo Station is an application closer to our daily life.

Up to now, cavern development has generally been either out of necessity (e.g. railways stations) or only considered where overriding circumstances exist (e.g. Island West Refuse Transfer Station and Stanley Sewage Treatment Works).

Innovative Use of Caverns
Cavern development is regarded as a new source of land supply. By relocating suitable government facilities to caverns, the original land as well as the adjacent sterilized land can be released for housing and other uses. This land is a valuable resource, particularly near or in the urban area. A recent example is the relocation of the Western Salt Water Service Reservoirs into cavern to make way for the development of the University of Hong Kong’s Centennial Campus.

Moreover, innovative cavern usage, such as columbaria, data centres and laboratories can release valuable land for other uses.

發展岩洞
發展岩洞是土地供應的一種新來源。通過將合適的政府設施遷入岩洞，原來以及相鄰受凍結的用地可以騰出作房屋或其他用途。這些土地，特別是位處市區附近的土地，是社會寶貴資源。近期例子包括將西區海水配水庫遷入岩洞，以騰出土地發展香港大學百周年校園。

此外，以創新的方式利用岩洞，如設置骨灰龕、數據中心或實驗室，便可騰出有價值的土地作其他用途。

Not-in-My-Backyard (NIMBY) facilities
“Not-in-My-Backyard (NIMBY)” facilities are facilities that are unsightly, emitting unpleasant odours, noisy and disrupting local communities. Putting them inside cavern would minimize adverse impacts on the community.
**Guiding Principles**

**Initial Site Selection Criteria**

**16 Initial Site Selection Criteria**

**Guiding Principles**

- Social Harmony & Benefits
  - 社會和諧與效益

- Economic Efficiency & Practicality
  - 經濟效率與實用性

**Enhanced Environmental Performance**

- Environmental impacts
  - 對環境的影響

- Environmental benefits
  - 對環境的好處

- Planning flexibility
  - 前期的靈活性

- Engineering feasibility
  - 工程的可行性

- Cost effectiveness
  - 成本效益

**Reclamation outside Victoria Harbour**

- Impact on local community
  - 對當地社區的影響

- Site location and accessibility
  - 新填海區域及交通便捷程度

- Meeting local needs
  - 能否滿足當地居民需要

**Rock Cavern Development**

- Social benefits at the releasing site upon relocation of existing facilities
  - 當原有設施搬出後，搬出的地區產生的社區效益

- Social impact at the cavern development site
  - 發展洞穴地點對社區的影響

- Environmental benefits in the vicinity of the releasing site upon relocation of existing facilities
  - 當原有設施搬出後，附近地區的效益

- Environmental impacts at the cavern development site
  - 發展洞穴地點對附近環境的影響

**Public Engagement Exercise to establish site selection criteria**

- 識公眾參與指引選址標準
<table>
<thead>
<tr>
<th>Events</th>
<th>Activity</th>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Roving Exhibitions</strong></td>
<td>活動</td>
<td>10 - 11 Nov 2011</td>
<td>G/F, North Atrium, Olympian City 2, Ta Wan Tai 1</td>
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<tr>
<td></td>
<td></td>
<td>12 - 14 Nov 2011</td>
<td>G/F, Kadoorie Heritage Discovery Centre, Tai Po Sha Tai 1</td>
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<td></td>
<td>15 - 20 Nov 2011</td>
<td>The Arcadia, Kowloon Park, Tai Po Sha Tai 1</td>
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<td></td>
<td></td>
<td>5 - 11 Dec 2011</td>
<td>G/F, Central Terminal Building, Central Pier No. 1, Causeway Bay 1</td>
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<td></td>
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<td>12 - 16 Dec 2011</td>
<td>G/F, Central Terminal Building, Central Pier No. 1, Causeway Bay 1</td>
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<td>6 - 8 Dec 2011</td>
<td>G/F, Central Terminal Building, Central Pier No. 1, Causeway Bay 1</td>
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<td>16 - 19 Feb 2012</td>
<td>G/F, Home Square, Sha Tin 1</td>
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<td></td>
<td><strong>Topical Discussions</strong></td>
<td>2:30pm – 5:30pm</td>
<td>Multi-Function Rooms 2A &amp; 2B, 2/F, Professional Training Institute, Happy Valley 1</td>
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<td>3 Dec 2011</td>
<td>Chamber 2, InnoCentre, Kowloon Tong 1</td>
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<td>7 Jan 2012</td>
<td>Chamber 2, InnoCentre, Kowloon Tong 1</td>
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<td></td>
<td>14 Jan 2012</td>
<td>Chamber 2, InnoCentre, Kowloon Tong 1</td>
</tr>
<tr>
<td>Public Forums</td>
<td>經濟論壇</td>
<td>2:30pm – 5:30pm</td>
<td>Multi-Function Rooms 2A &amp; 2B, 2/F, Professional Training Institute, Happy Valley 1</td>
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<td>4 Feb 2012</td>
<td>Auditorium, Sky Hong Kong Federation of Youth Group, North Point 1</td>
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<td></td>
<td>11 Feb 2012</td>
<td>Room 337, Lecture Hall, Caritas Bianchi College of Careers, Tsuen Wan 1</td>
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<tr>
<td></td>
<td></td>
<td>18 Feb 2012</td>
<td>Room 307, Lecture Hall, Caritas Bianchi College of Careers, Tsuen Wan 1</td>
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</table>

At this stage of the study, we are particularly interested in knowing your views on the following:

- **Option of increasing land supply through reclamation outside Victoria Harbour.**
- **Option of increasing land supply through rock cavern development.**
- **Site selection criteria.**

**Proposed land uses and possible site locations**

We will consider your views and, together with findings of the technical studies, work out a set of site selection criteria so that potential sites can be identified. We plan to conduct the Stage 2 Public Engagement exercise in the third quarter of 2012 to solicit views on the potential sites.

Your views are important. Please send your comments at or before 29 February 2012.

Please voice your opinions by:

- Sharing your comments online at www.landsupply.hk
- Emailing us at landsupply@cdcc.gov.hk
- Sending a fax to (852) 2714 2054
- Sending written comments to 4/F Civil Engineering and Development Building, 101 Princess Margaret Road, Hamartin, Kowloon (Please specify “Enhancing Land Supply Strategy”)

Your Views are Welcome

**欢迎你提出意见**
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