

A SURVEY OF OPINIONS FROM RESIDENTS IN TSEUNG KWAN O ON THE NUISANCES FROM THE SOUTH-EAST NEW TERRITORIES (SENT) LANDFILL

King Ming CHAN ^{1,3}, and Gary Kwok-Wai FAN ^{2, 3}

**¹Department of Biochemistry and Environmental Science Programme,
The Chinese university of Hong Kong, Sha Tin, N.T., Hong Kong SAR;**

**² Green Community, B5 Wei On Garden, Tseung Kwan O, New
Territories, Hong Kong SAR; and Council Member (elected), Sai Kung
District Council, The Government of HKSAR; and**

**³The Democratic Party, Hanley House, 788 Nathan Road, Kowloon,
Hong Kong SAR**

¹ kingchan@cuhk.edu.hk; ² garykwfan@gmail.com

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Sanitary Landfills

106 hectares



67 hectares

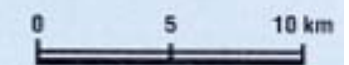


100 hectares



Adapted from EPD, 1999.

- ▲ Tentative RTS under planning
- Operational Landfills
- Incinerator
- Bulk transfer by road
- Bulk transfer by barge





Adapted from
EPD, 1995.

Refuse Transfer Station

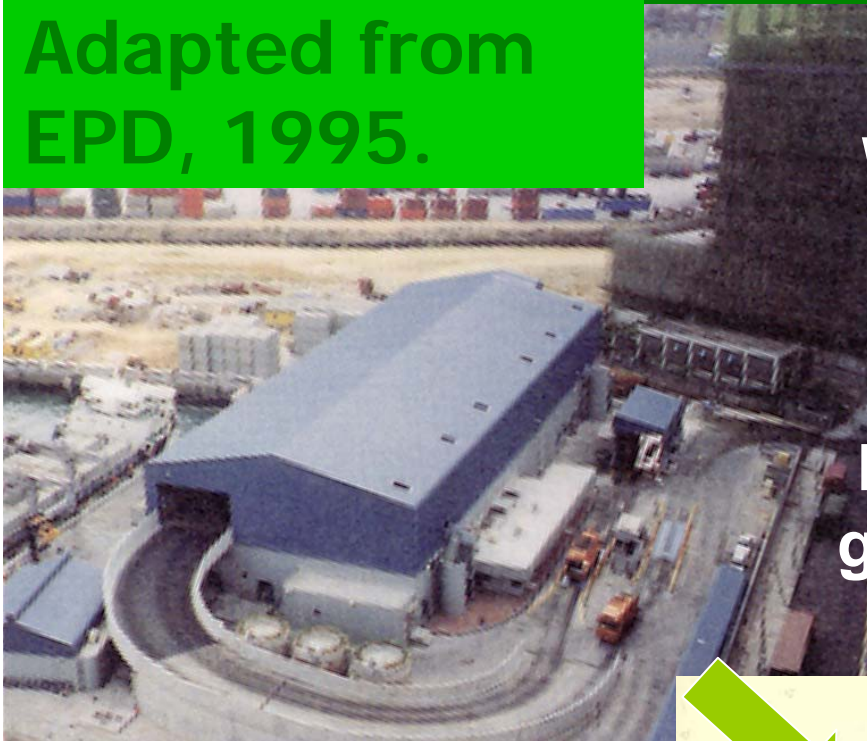
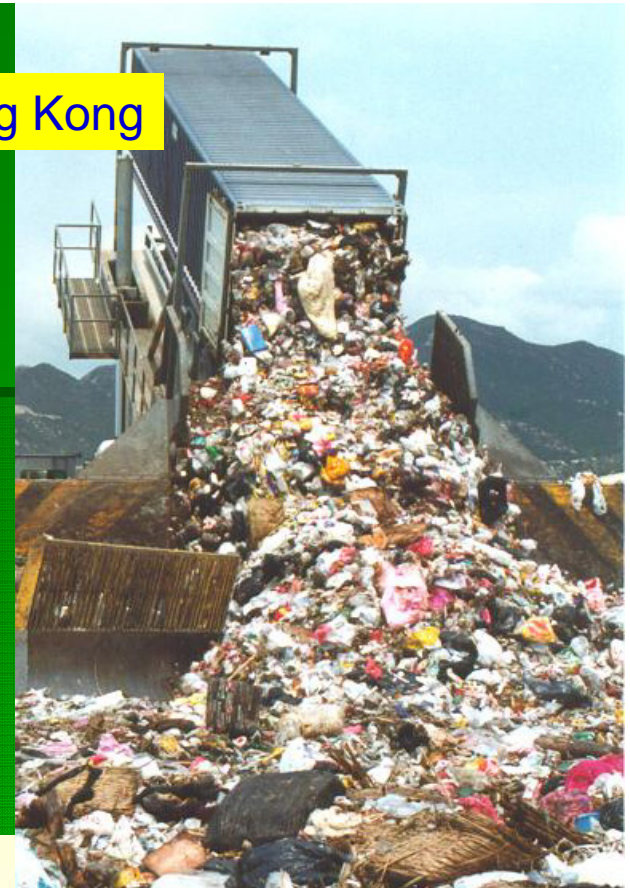


1. Sanitary landfill as major MSW management in Hong Kong

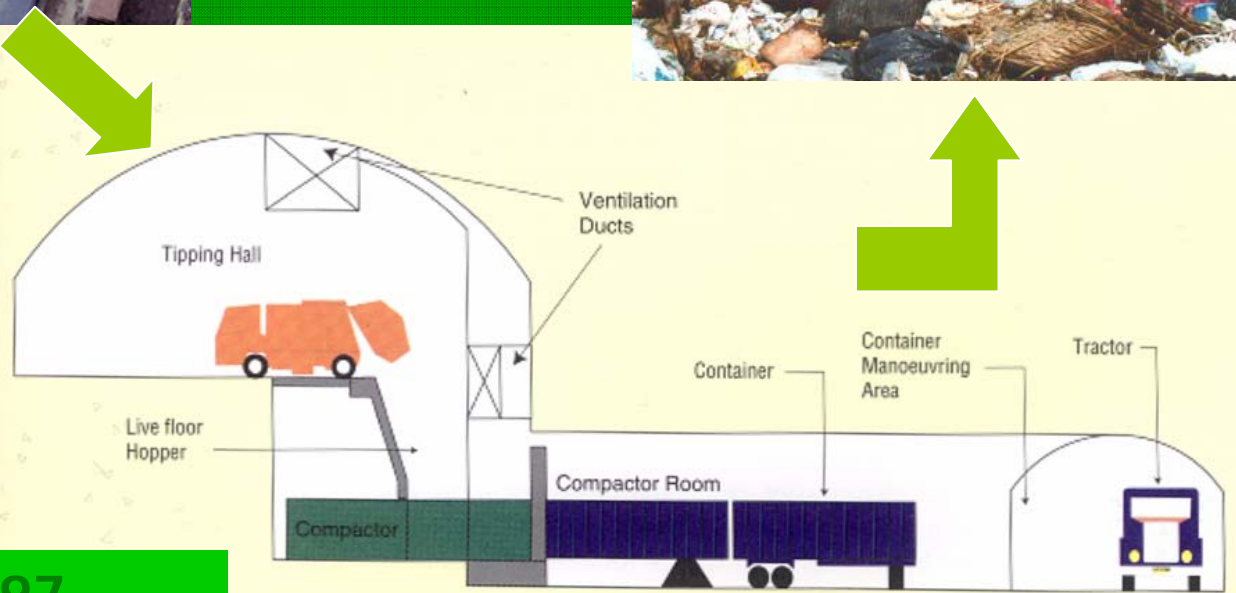
1. Sanitary landfill as major MSW management in Hong Kong

Adapted from EPD, 1995.

Construction Wastes, toxic wastes and packaging Wastes must be avoided to go to landfills.



Refuse Transfer Station for waste compacting to reduce waste volume.



Adapted from EPD, 1997.

West Kowloon Refuse Transfer Station

Adapted from EPD, 1995.



1. Sanitary landfill as major MSW management in Hong Kong



Compacted solid waste sent via boat or truck
Sanitary landfill site with control tipping and landfill gas control

1. Sanitary landfill as major MSW management in Hong Kong

Major problems
with landfills:

[1] Landfill gas
and [2] leachate.



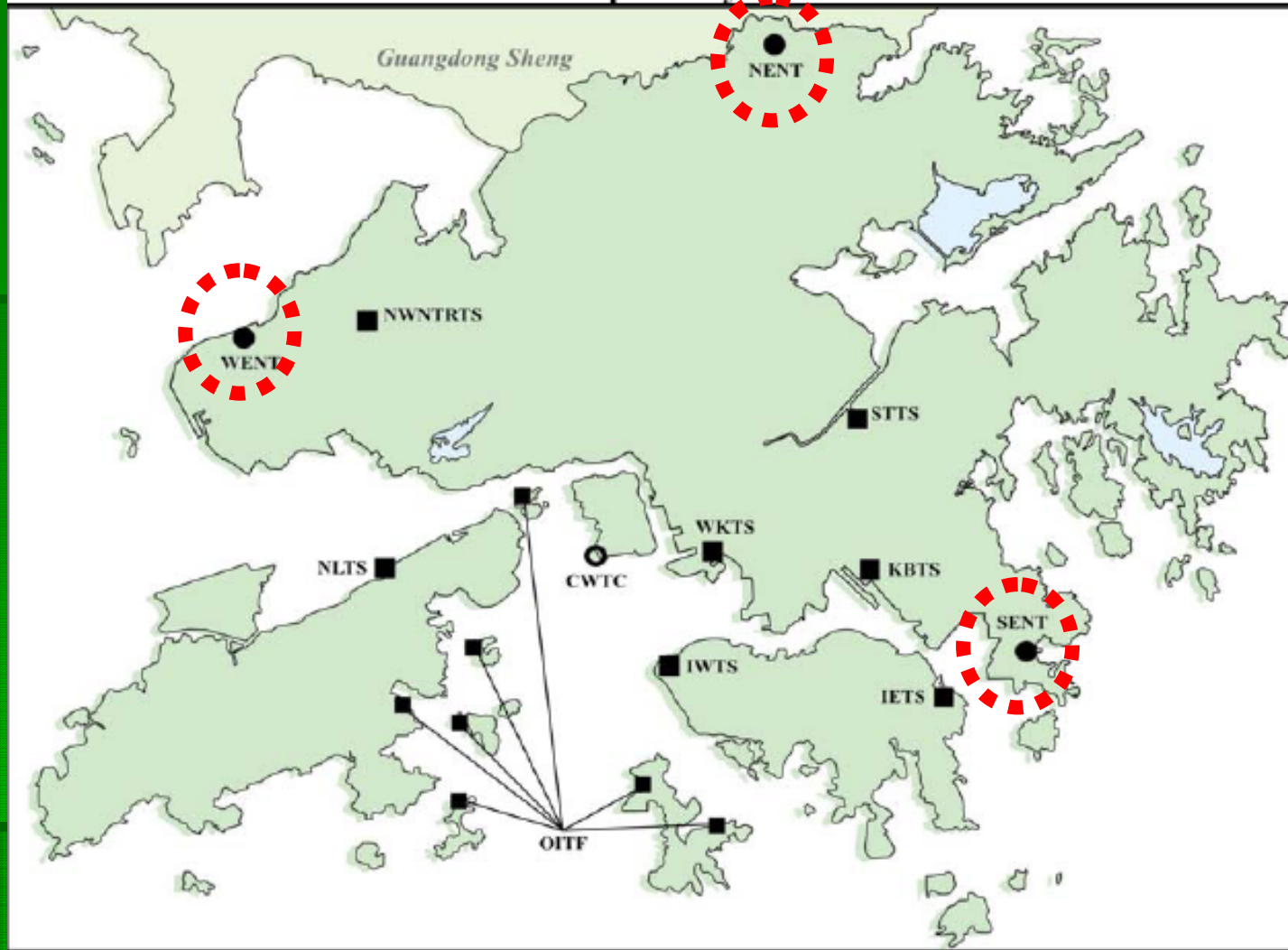
Adapted from
EPD, 1998.

Existing Facilities for municipal waste management are costly

- Efficient refuse transfer system (0.355 billions per year)
- Chemical waste treatment center at Tsing Yi (0.435 billions per year to run the chemical waste plants)
- Costly to build and maintain landfills: 6 billions for three sites and 0.432 billion HKD per year to run these sites.
- Landfills have their life-span: NENT/ WENT/ SENT landfills will be filled up by 2015 or 2012.

1. Sanitary landfill as major MSW management in Hong Kong

Plate 2.4 Solid waste disposal by destination in 2006

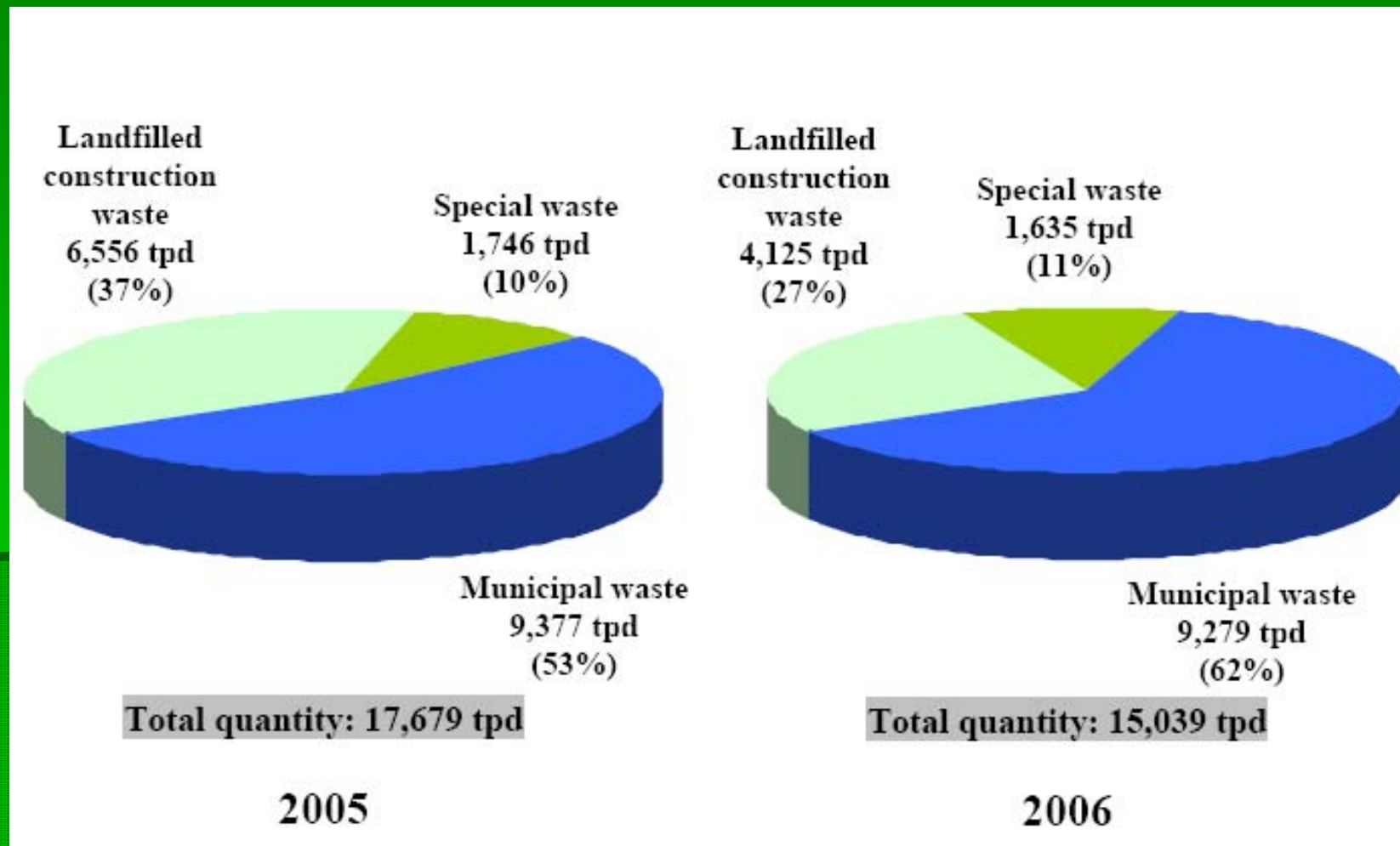


| Landfill | ● | WENT | SENT | NENT |
|----------|---|-----------|-----------|-----------|
| | | 6,577 tpd | 6,211 tpd | 2,252 tpd |
| | | (-0.6%) | (-23.3%) | (-23.9%) |

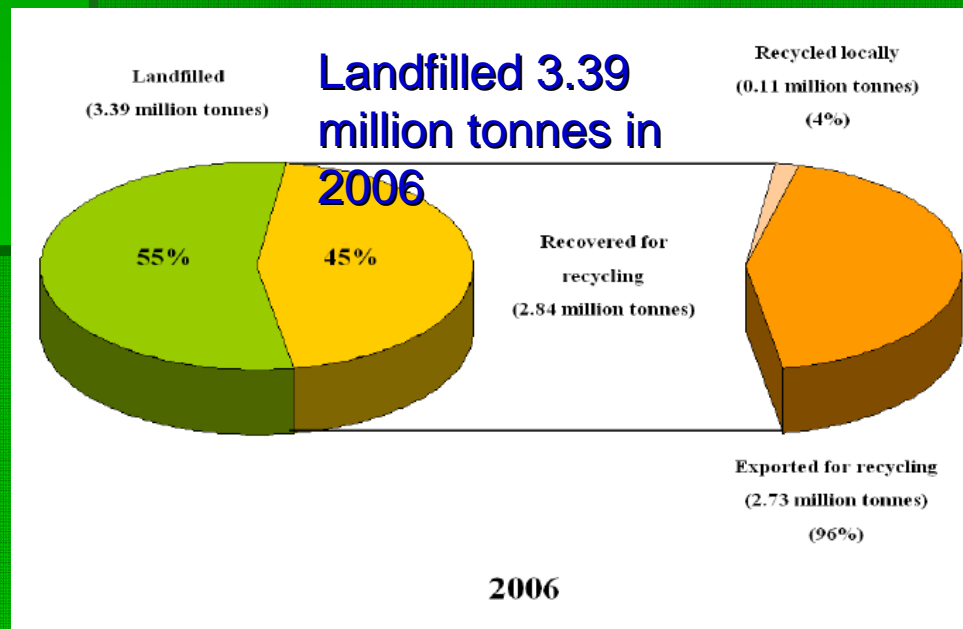
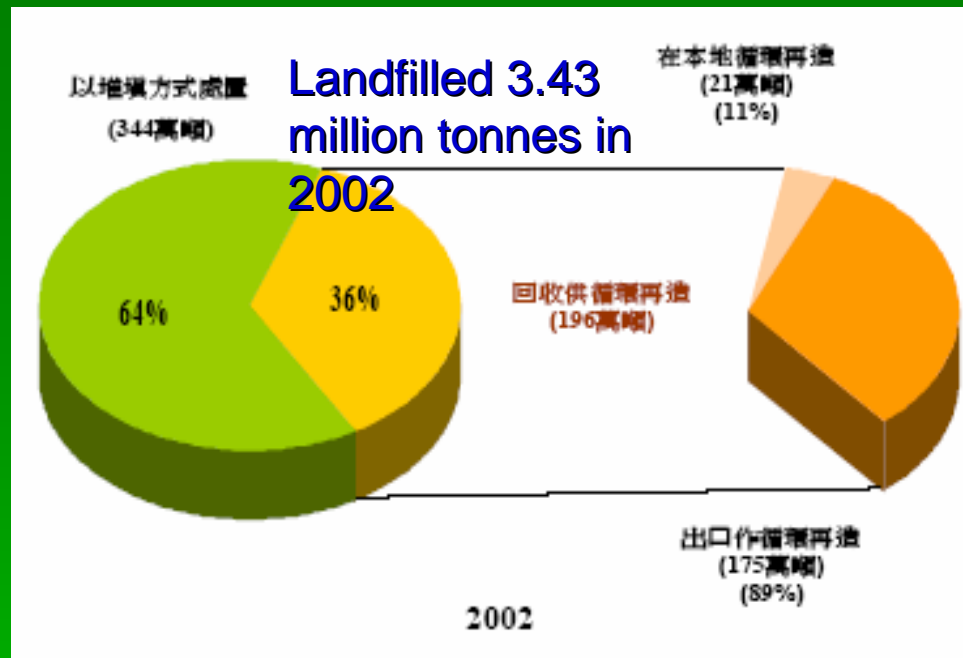
Adapted from EPD 2006 Monitoring of Solid Waste in Hong Kong, Waste Statistics for 2006 (<http://www.epd.gov.hk/epd/english/environmentinhk/waste/data/files/msw2006.pdf>)

Solid Waste Disposed at Landfills

Adapted from EPD 2006 Monitoring of Solid Waste in Hong Kong, Waste Statistics for 2006 (<http://www.epd.gov.hk/epd/english/environmentinhk/waste/data/files/msw2006.pdf>)



1. Sanitary landfill as major MSW management in Hong Kong



Municipal Wastes Disposed of to Landfills remain unchanged: increase of waste recycled < increase of waste production = waste disposal to landfills remain unchanged.

New Town Development in Hong Kong

Tseung Kwan O in 1981...



In 1980s, TKO became a New Town and massive land reclamation was scheduled to accommodate a population of 400,000 by 2010.

2. Rationale of this study

Tseung Kwan O in 2002



將軍澳的現在與未來

2. Rationale of this study



也與堆填區同在！

TKO Stage I

The future Tseung Kwan O



2. Rationale of this study

將軍澳居民日忍薰天惡臭 堆填區入侵郊野公園 焚化爐伺機進攻

議員駕泥頭車示威反對將軍澳堆填區擴建

New Territories East Branch, The Democratic Party

民主黨新界東支部



1. Fly infestation
2. Odour
3. Waste Collection Vehicles

2. Rationale of this study

Landfills are causing nuisances to ~ 150,000 residents near by with truck and odour problems.

Photo taken in August 2007

50 Residential Buildings
to be built .by 2011



2. Rationale of this study

Stage I

Stage II/III

1.2 km

SENT in
operation

2.8 km

Tseung Kwan O, Junk Bay Landfills stage I (closed 1994), II/III (closed 1995), and SENT.

將軍澳堆填區意見調查2007 綠色社區 Green Community

(一) 調查及回收資料

調查日期：2007年7月3日至7月17日

調查時間：下午4：30至晚上7：30

調查方法：本會義工於

- 毓雅里近旭輝臺處
- 景林邨對出及和明苑
- 將軍澳地鐵站B出口

Yuk Ah Lane, King Lam and Woo Ming Estates, TKO MTR Exit B
向行人進行問卷調查 (Face to face street survey with standard questionnaire conducted by volunteers of Green Community)。



2. Rationale of this study

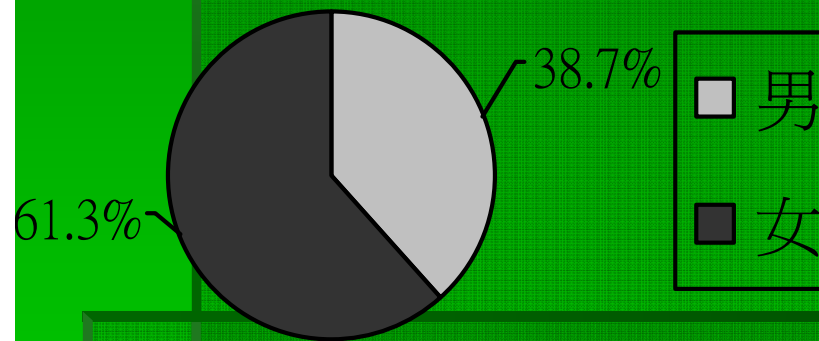
(二) 回收情況

1. 成功問卷數目：416人

(三) 問卷結果

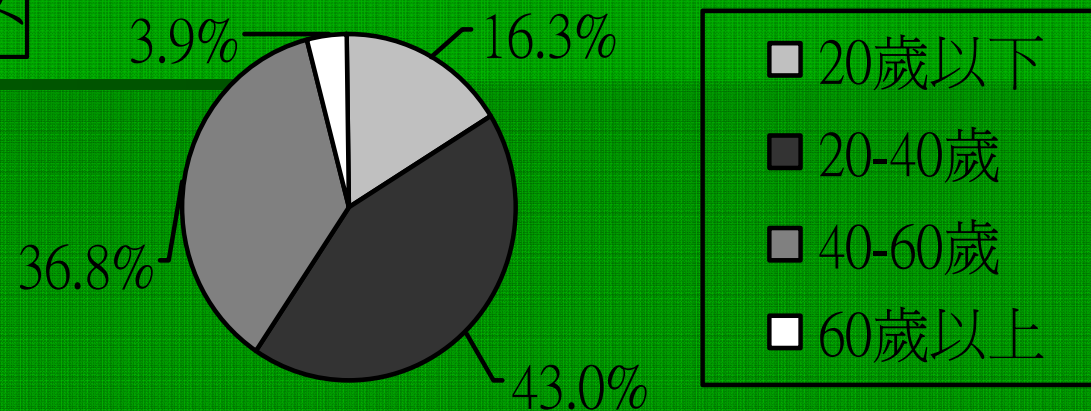
1 · 被訪者性別 Sexes

- 男 38.7% Male
- 女 61.3% Female



2 · 被訪者年齡 Age Groups

- 20歲以下 16.3%
- 20-40歲 43%
- 40-60歲 36.8%
- 60歲以上 3.9%



3. Major findings and further studies

3 · 被訪者教育程度 Education Levels

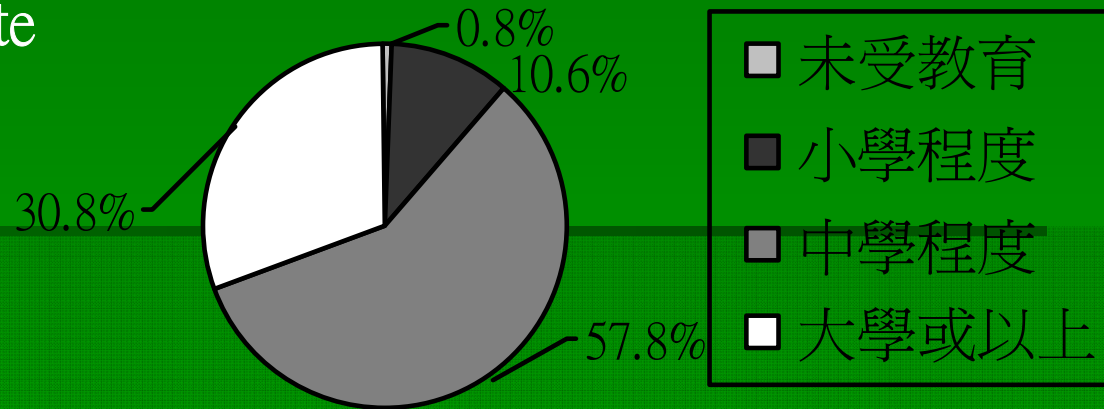
未受教育 0.8% illiterate

小學 10.6% Primary

中學 57.8% Secondary

大學或以上 30.8%

College or above



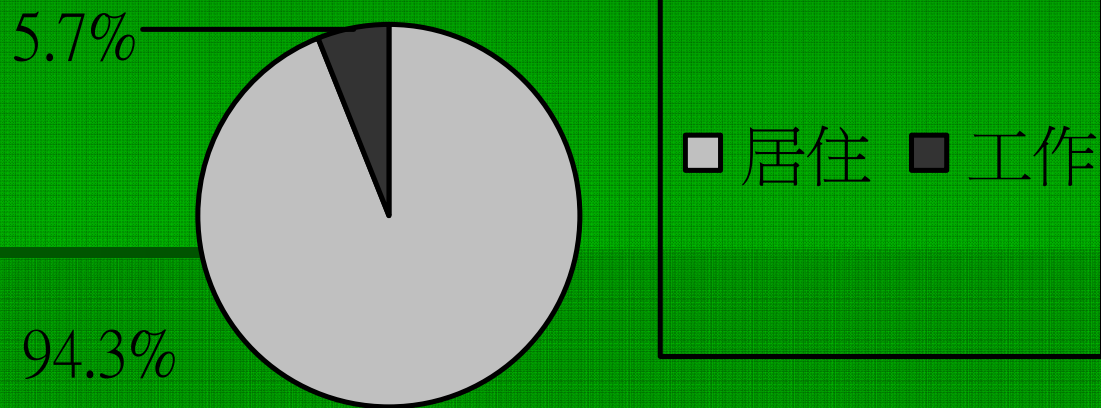
4 · 被訪者

在將軍澳居住 94.3%

Living in TKO

在將軍澳工作 5.7%

Only work at TKO

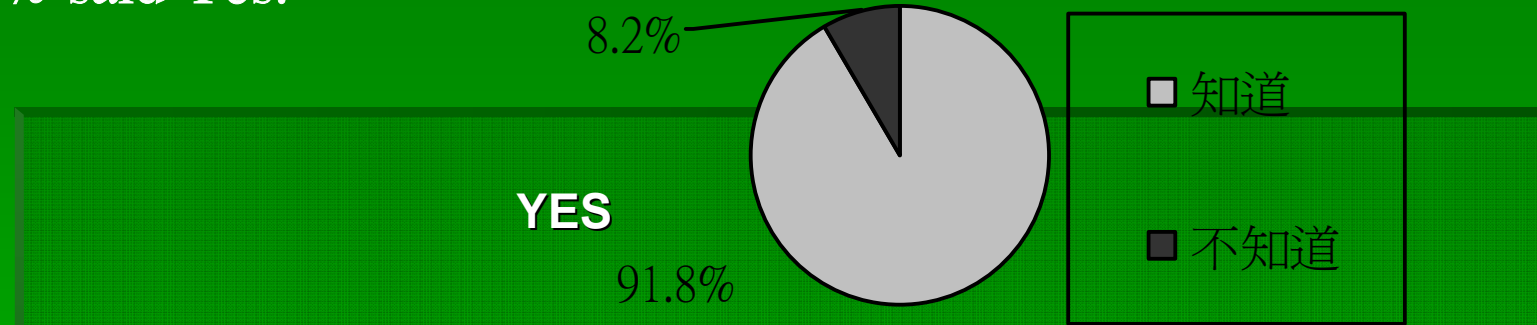


3. Major findings and further studies

5 · 是否知道將軍澳有堆填區？

Did you know about the landfill in TKO?

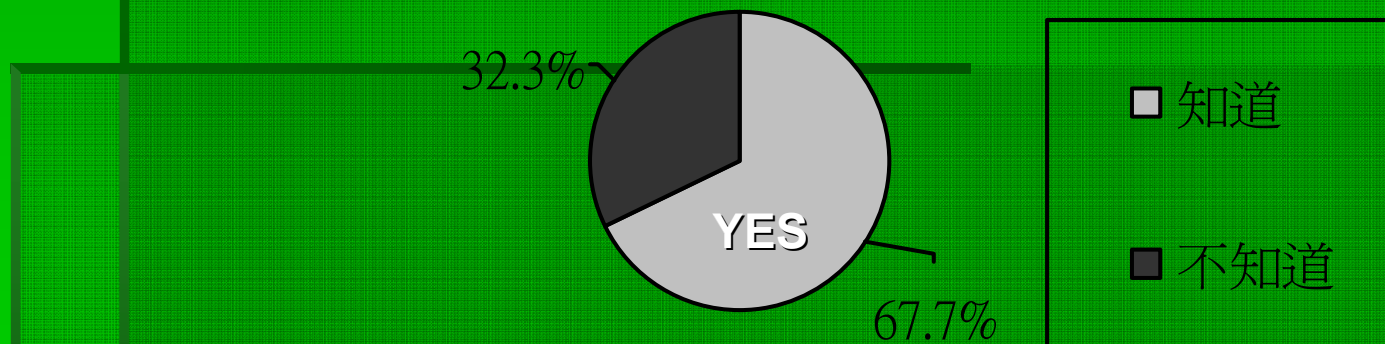
92% said Yes.



6 · 在搬進將軍澳前，是否知道有堆填區

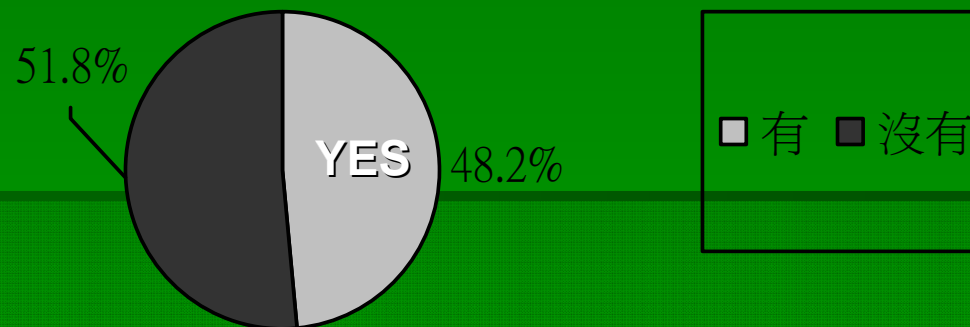
Did you know about the landfill before you moved to TKO?

67.7% said yes.



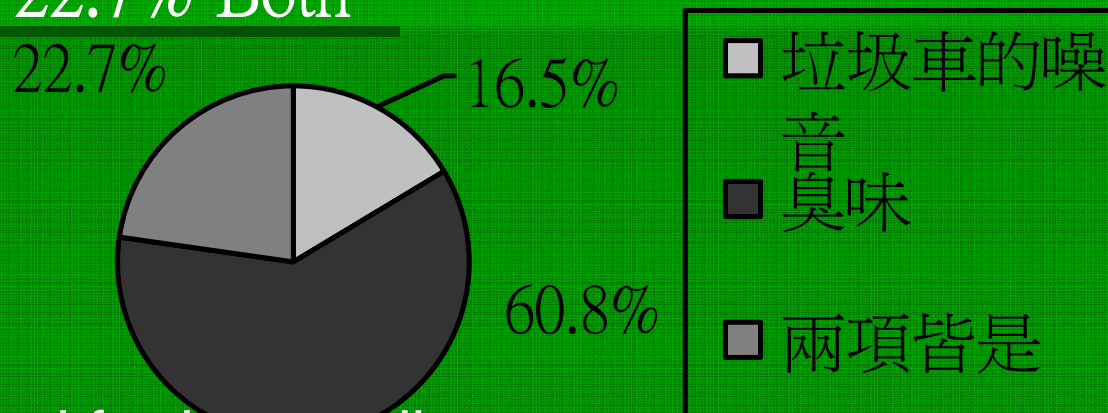
3. Major findings and further studies

7 · 將軍澳堆積區有沒有對被訪者構成滋擾？
Does the landfill cause any nuisances? 48.2% said yes.



8 · 堆填區為被訪者帶來甚麼滋擾？
What sorts of nuisances come from the landfill?

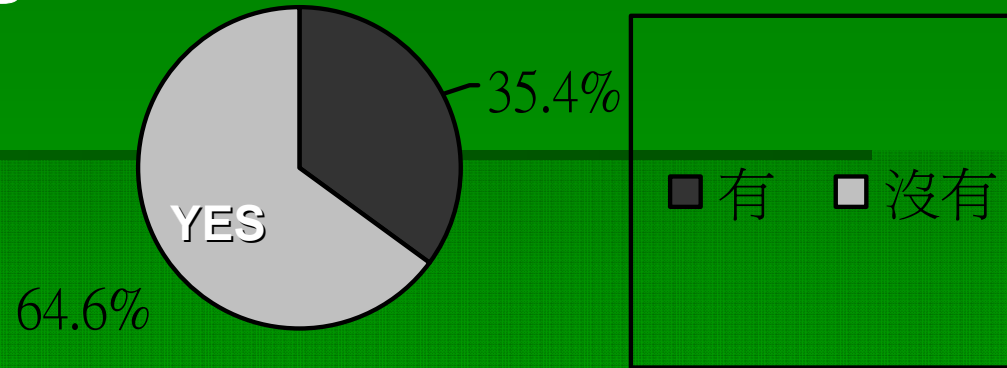
- 垃圾車的噪音 16.5% Noise from truck
- 堆填區傳出的臭味 60.8% Sticky Smell
- 以上兩項皆是 22.7% Both



3. Major findings and further studies

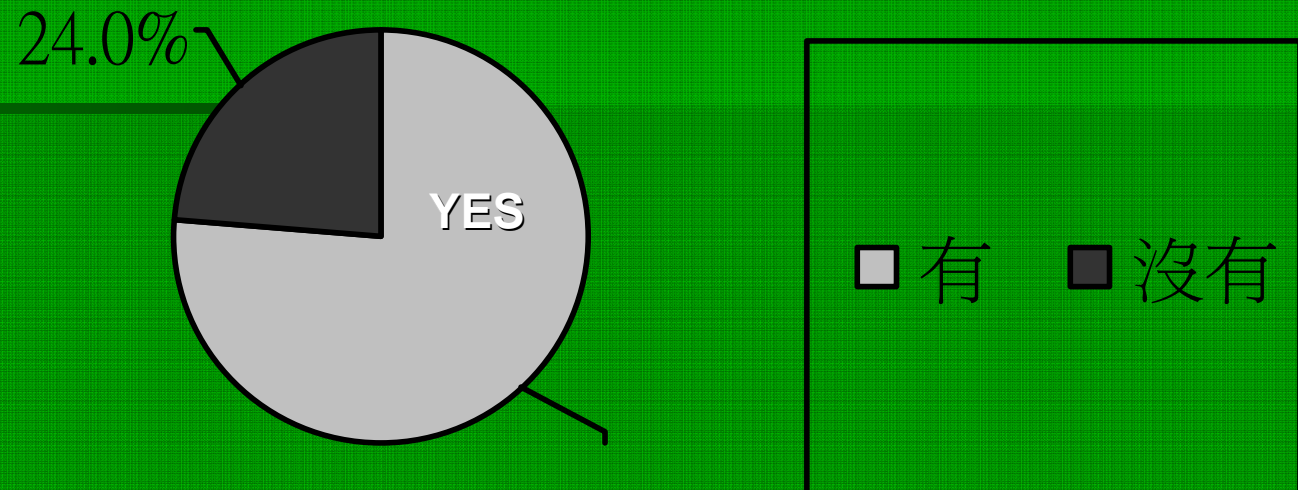
9 · 是否想過因爲堆填區的滋擾而搬離將軍澳?

Ever thought about moving out of TKO due to the nuisances?
64.6% said yes.



10 · 有沒有擔心堆填區影響區內樓價?

Ever worried about the property prices are affected by the landfill?
76% said yes



3. Major findings and further studies 76.0%

Current Debate: Should we expand it a bit to our country park next to SENT and allow the landfill to live 5 year longer to 2020?

**South East NT
Landfill (SENT):
1994 to present**



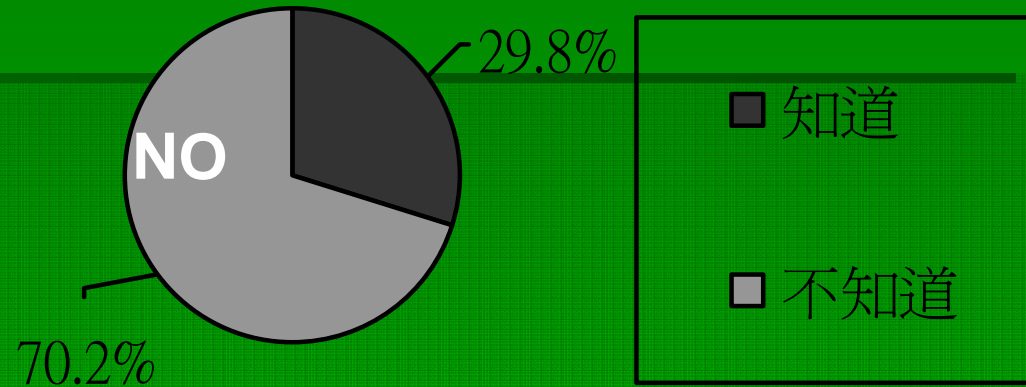
3. Major findings and further studies

90% respondents said NO to the extension of SENT according to this survey

11. 是否知道堆填區將擴建至清水灣郊野公園?

Do you know about the extension of SENT to part of the CWB country Park?

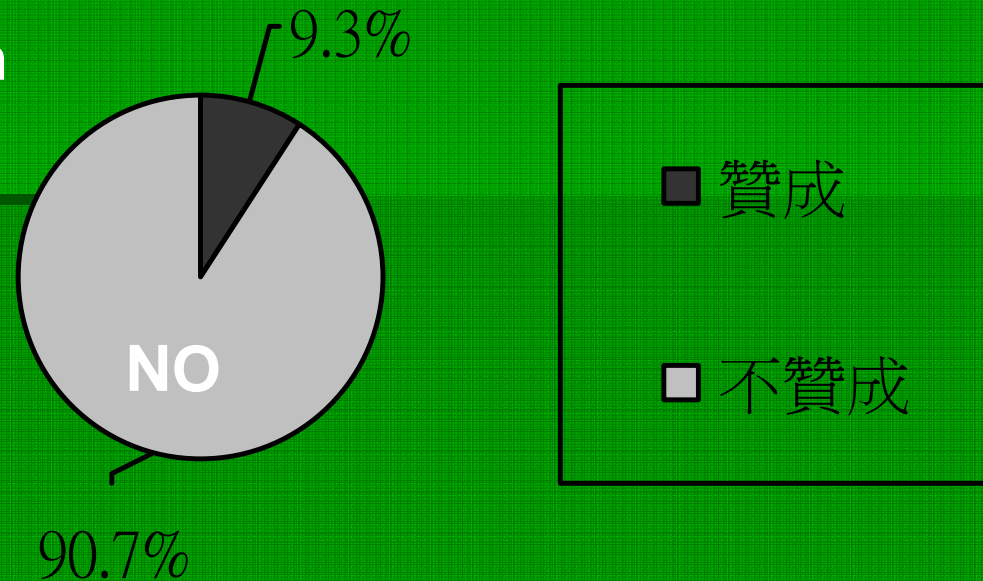
70% said NO.



12. 是否贊成以上政策

Do you agree with such extension policy?

90% said No.



3. Major findings and further studies

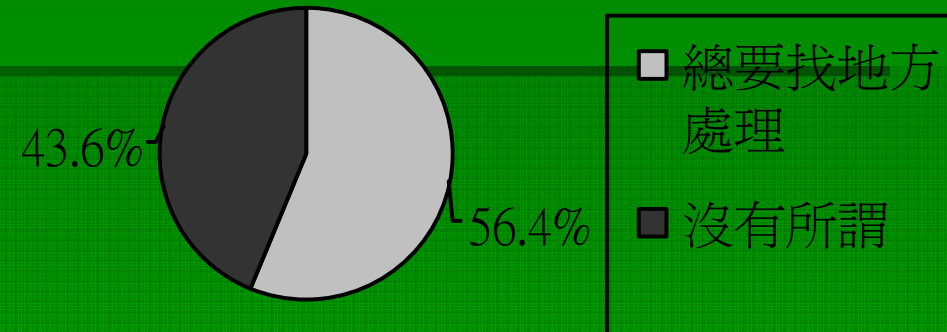
1. A majority (90%) of the respondents do not agree to the extension plan for the SENT landfill, and they urge the government to improve its waste recycling capabilities.
2. Only 16% agreed with the use of incineration for MSW treatment.



3. Major findings and further studies

13. 為甚麼贊成？ Why would you agree with the extension?

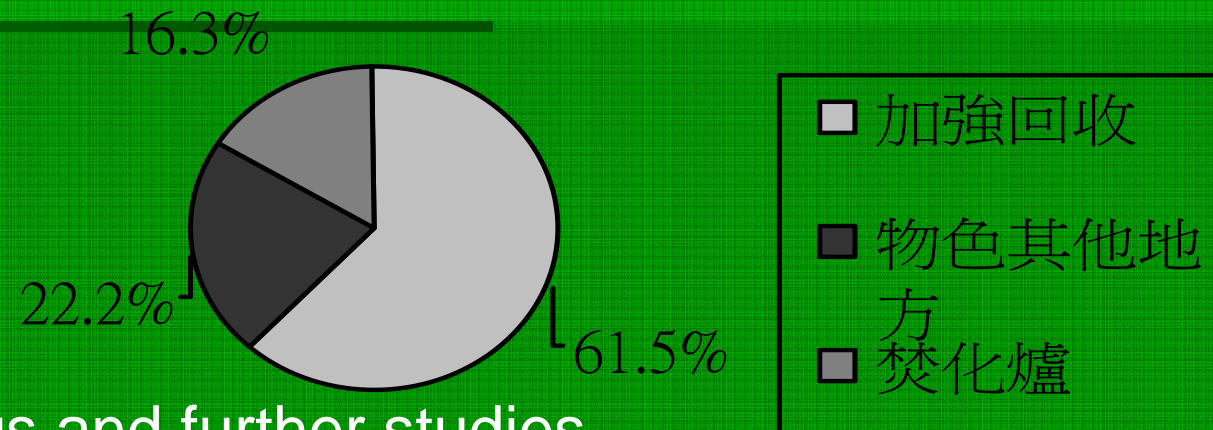
- 廢物總要找地方處理 56.4% Got to find a place to handle the waste
- 沒有所謂 43.6% Doesn't matter



14. 為甚麼不贊成？

Why don't you agree with such extension policy?

- 政府應加強廢物回收 61.5% The govt' should enhance waste recycling
- 政府應物色其他地方處理 22.2% The govt' should find some where else
- 政府應以焚化爐處理廢物 16.3% The govt' should use incineration



3. Major findings and further studies

SUMMARY & CONCLUSIONS

- SENT landfill causes nuisances of odour and waste trucks to the residents of TKO.
- 90% respondents opposed the proposal of SENT extension; 60% urged for a better waste recycling scheme and only 16% agreed with using incineration for waste management.
- A reference distance of 5 kilometres is suggested to be kept between residential areas and operating landfills.



3. Major findings and further studies

Further studies:

- A survey focusing on the new development areas of TKO (TKO South and LOHAS Park) will be needed.
- Guidelines on the reasonable distance between operating landfills and residential areas should be formulated.
- Sewage sludge is being dumped to SENT causing the odour nuisances according to some government officials; a survey in 2008 will be carried out to learn if there is any improvement at all if the source is identified.

3. Major findings and further studies

DISCUSSION

ALTERNATIVES:

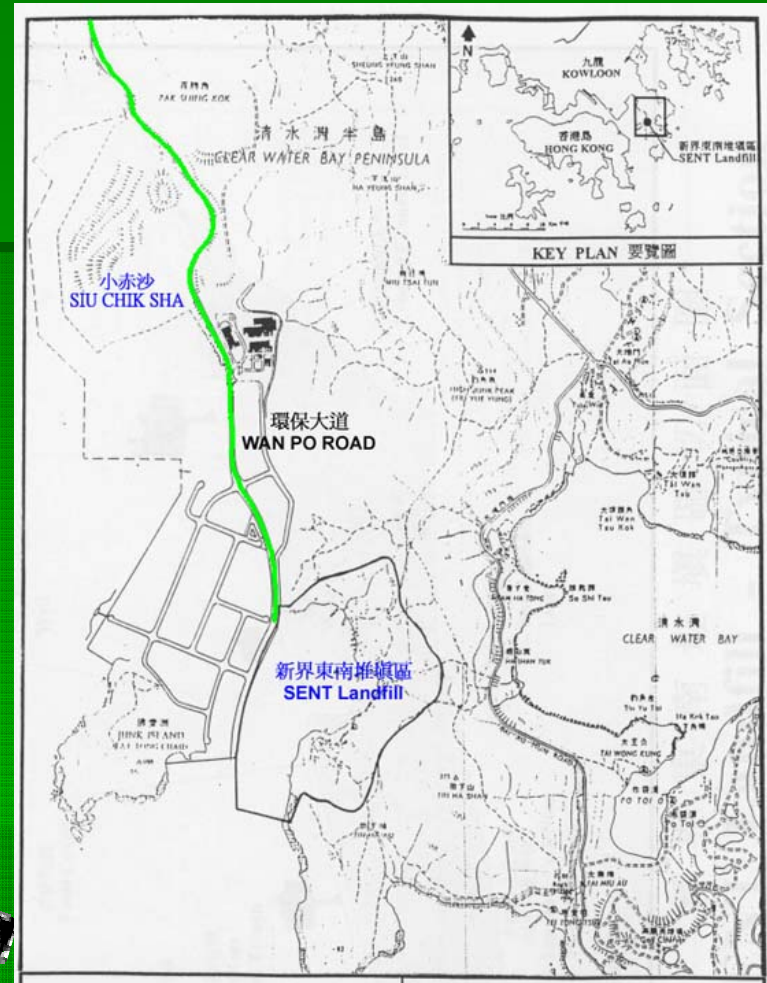
Zero waste policy/zero landfill policy

Green Taxes and household trash fee for waste reduction

Better waste recycling facilities and composting facilities.

BANANA:

Build Absolutely Nothing Anywhere Near Anyone

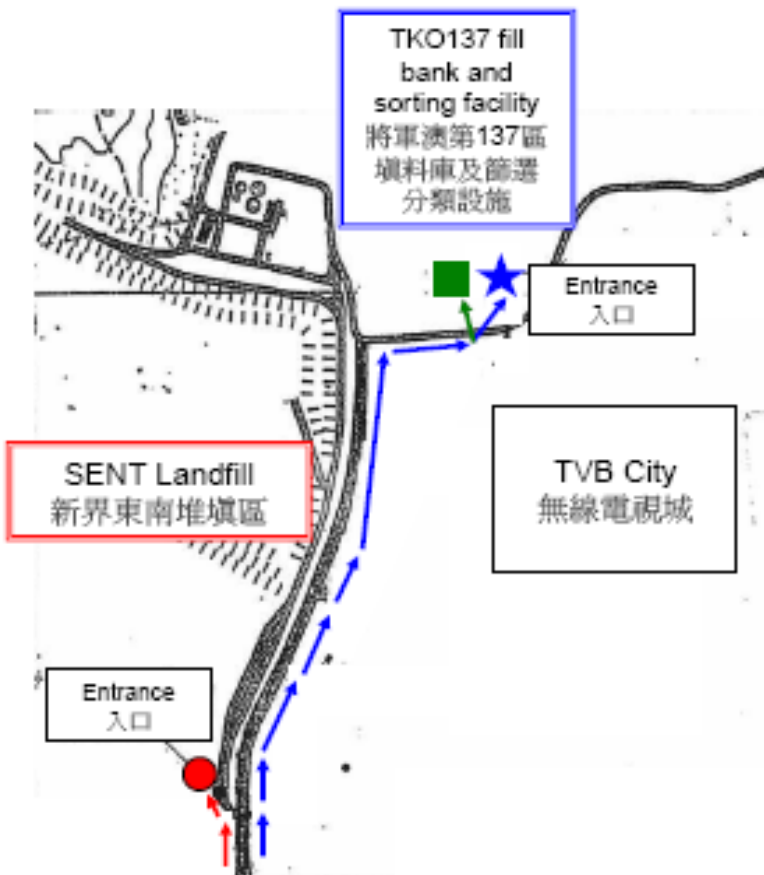




Construction Waste



Location map of SENT Landfill,
Fill Bank and Sorting Facility
堆填區, 填料庫及
篩選分類設施位置圖



Construction Waste
建築廢物

| Landfill (\$125/tonne) 堆填區 (\$125/噸) | |
|--|---|
| Construction waste containing not more than 50% by weight of inert construction waste 含有按重量計不多於50%的惰性建築廢物 | ✓ |
| Construction waste containing more than 50% by weight of inert construction waste 含有按重量計多於50%的惰性建築廢物 | ✗ |
| Construction waste consisting entirely of inert construction waste 完全是惰性建築廢物 | ✗ |

Construction Waste
建築廢物

| Sorting Facility (\$100/tonne) 篩選分類設施(\$100/噸) | |
|--|---|
| Construction waste containing not more than 50% by weight of inert construction waste 含有按重量計不多於50%的惰性建築廢物 | ✗ |
| Construction waste containing more than 50% by weight of inert construction waste 含有按重量計多於50%的惰性建築廢物 | ✓ |
| Construction waste consisting entirely of inert construction waste 完全是惰性建築廢物 | ✗ |

Construction Waste
建築廢物

| Fill Bank (\$27/tonne) 填料庫 (\$27/噸) | |
|--|---|
| Construction waste containing not more than 50% by weight of inert construction waste 含有按重量計不多於50%的惰性建築廢物 | ✗ |
| Construction waste containing more than 50% by weight of inert construction waste 含有按重量計多於50%的惰性建築廢物 | ✗ |
| Construction waste consisting entirely of inert construction waste 完全是惰性建築廢物 | ✓ |

Construction Wastes keep rising, mostly sent to the public fills= ocean dumping or land reclamation!

From Hong Kong to GuangDong.



Sorting of construction waste would help waste recycling and reduce disposal to landfills.

charging system to “slow down” our C & D wastes and efficient sorting facility for better reuse of C & D wastes disposed of to landfills

Reuse of construction waste materials in mainland China

建築廢物分類處理設施

Construction Waste Sorting Facility



填料庫



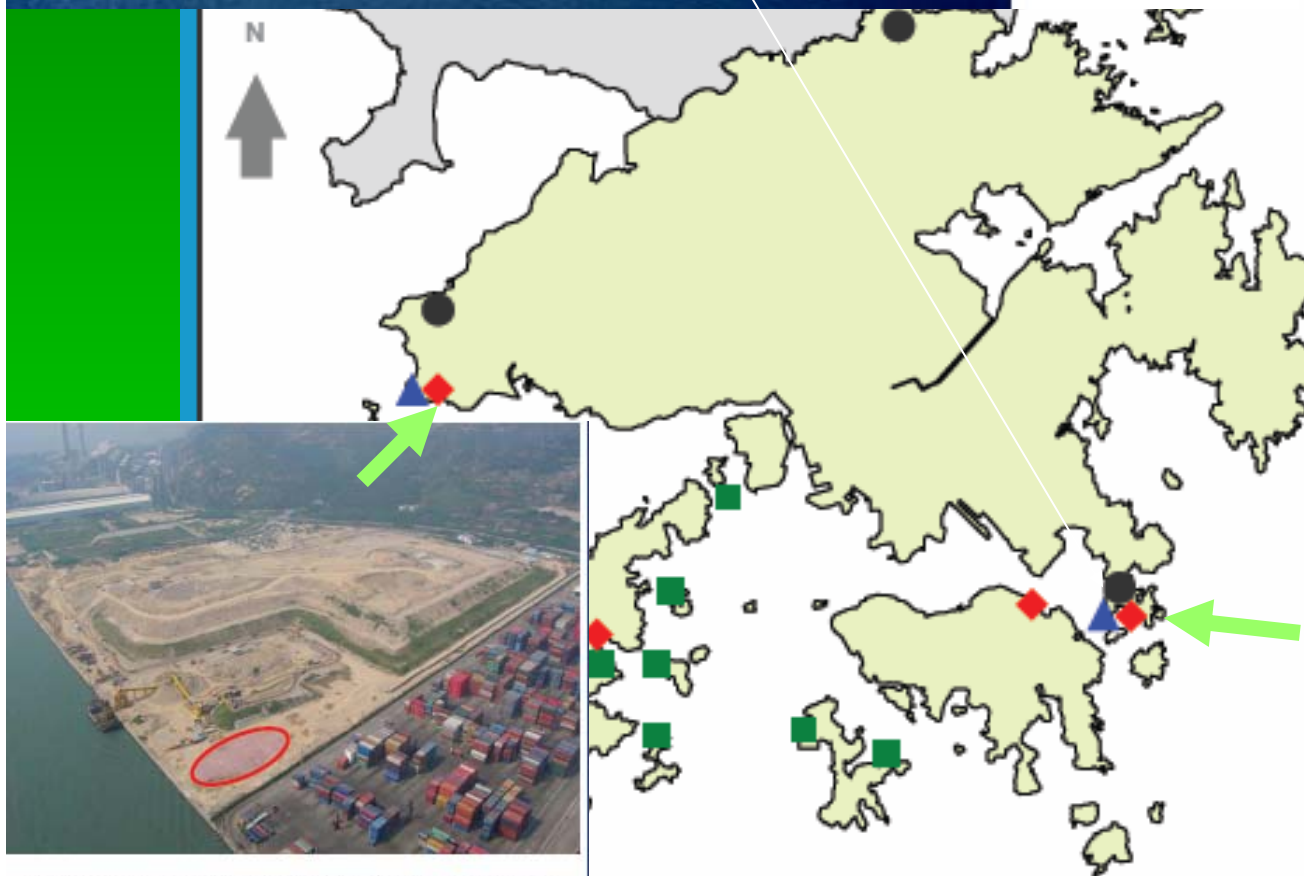
公眾填土躉船轉運站



公眾填料接收設施

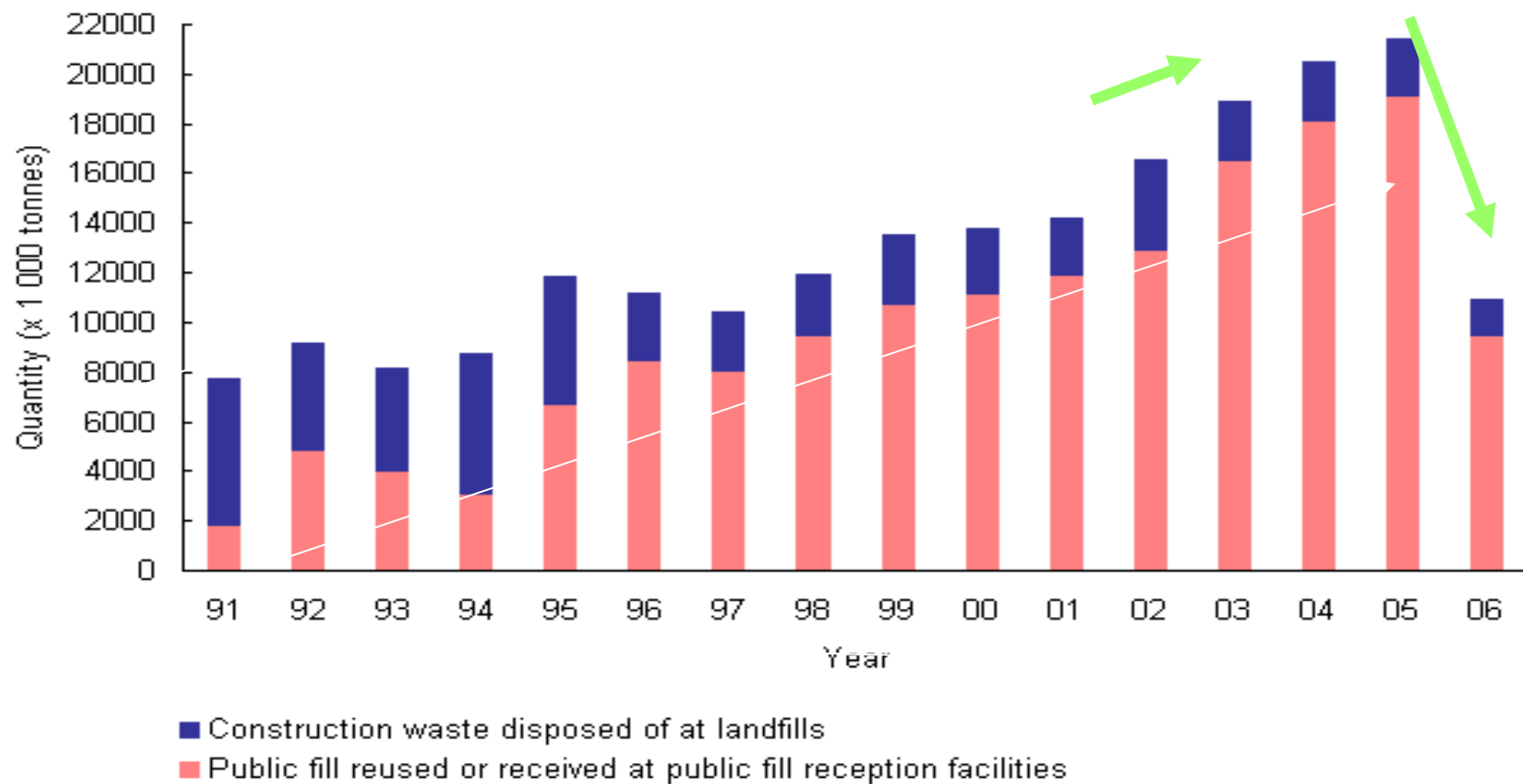


將軍澳 137 區建築廢物篩選分類設施



屯門 38 區建築廢物篩選分類設施

Quantities of Construction Waste (construction and demolition wastes) in 1991-2006



Wastes (annual) disposed off from 91 to 06

