Mismatch of Population Size and Housing Stock in HK2030+ Study

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Legislative Council Member
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Population Size

Population Projection in 2046 = 8,214,100

Private Stock

Net Housing Requirement in the 1st 10 years (2016-2026) (under LTHS model) 460,000 (46%)

Net Housing Requirement beyond the 1st 10 years (2026-2046) (under current assessment) 540,000 (54%)

Net Increase in number of households from 2026 to 2046 (183,400) (18.3%)

Households displaced by redevelopment = Public housing (14,800) + private buildings aged 70 and above (258,000) (273,000) (27.3%)

Miscellaneous factors (non-local students, non-local buyers and mobile residents-only households) (73,400) (7.3%)

Adjustment factor (vacancy rate in private sector) (1.02) (1%)

Assume 2 times of that projected under LTHS

1m more Housing Units to be built from 2016-2046

Hk2030+ consultation paper
## Total Housing Stock

### Six People in One Unit Specifications

<table>
<thead>
<tr>
<th></th>
<th>Public Housing Units</th>
<th>Private Housing Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>118.8 million</td>
<td>151.9 million</td>
</tr>
<tr>
<td></td>
<td>現存公營房單位比例</td>
<td>44:56</td>
</tr>
<tr>
<td></td>
<td>178.8 million (118.8 + 60)</td>
<td>166.1 million (151.9 + 40 - 25.8)</td>
</tr>
<tr>
<td></td>
<td>粗略估計2046年整體房單位</td>
<td>約345萬個</td>
</tr>
<tr>
<td></td>
<td>52:48</td>
<td></td>
</tr>
</tbody>
</table>

### Calculation

- **Gross Population:** 732.48 million
- **Resident Public Housing Population:** 334 million (45.6%)
- **Resident Private Housing Population:** 394.8 million (53.9%)
- **Temporary Housing Population:** 3.7 million (0.5%)

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**Notes:**

- Includes rental public and subsidized housing units.

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### Total Housing Stock

<table>
<thead>
<tr>
<th>Year</th>
<th>Public Housing Units (mill)</th>
<th>Private Housing Units (mill)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1.188</td>
<td>1.519</td>
</tr>
<tr>
<td>2046</td>
<td>1.788</td>
<td>1.661</td>
</tr>
</tbody>
</table>

- Assume 6:4 between newly built public and private housing units
- i.e. 600,000 new units for public housing, 400,000 new units for private housing
- Thus, 1.188+0.6 = 1.788 public housing units in 2046
- Assume 258000 private housing units will be demolished, thus. 1.519+0.4-0.258 = 1.661 private housing units in 2046

# Ave Household Size

<table>
<thead>
<tr>
<th>Year</th>
<th>Ave Household Size in Public Housing Units (no. of persons)</th>
<th>Ave Household Size in Private Housing Units (no. of persons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>2046</td>
<td>2.8</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Here I assume it drops faster in private housing due to the prevalence of single person households, but it is restricted in the allocation of public housing.

## Total No. of Persons

<table>
<thead>
<tr>
<th>Year</th>
<th>Total No. of Persons in Public Housing Units (mill)</th>
<th>Total No. of Persons in Private Housing Units (mill)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>3.4452</td>
<td>4.4051</td>
</tr>
<tr>
<td>2046</td>
<td>5.0064</td>
<td>4.3186</td>
</tr>
</tbody>
</table>

## Mismatch between Population and Housing Stock

<table>
<thead>
<tr>
<th>Year</th>
<th>Total No. of Persons in Housing Units (mill)</th>
<th>Total No. of Population Projection (mill)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>7.8503</td>
<td>7.3248</td>
</tr>
<tr>
<td>2046</td>
<td>9.3250</td>
<td>8.2141</td>
</tr>
</tbody>
</table>

The most probable reason for the mismatch is due to vacant units.
## Derived Vacancy Rate of Housing Stock

<table>
<thead>
<tr>
<th>Year</th>
<th>Derived Vacancy Rate</th>
<th>Derived No. of Vacant Units (mill)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>12%*</td>
<td>0.181</td>
</tr>
<tr>
<td>2046</td>
<td>26%</td>
<td>0.426</td>
</tr>
</tbody>
</table>

*in contrast with the 2015 vacancy rate of 3%*
Too Many Public Housing Units in 2046?

- 600,000 new built public housing units
- Household size 2.8 pers/unit
- Accommodate 1.68m people

2015: 7.3248m people
2046: 8.2141m people
Increase by: 0.8893m people
The End

comments are welcome.

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