

LOW-COST RENTAL HOUSING IN HONG KONG



Technical Assistance Panel Report | 13–14 DECEMBER 2022

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Cover: Hong Kong, SAR – November 2019: Children playing on kids playground in Hong Kong.



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The Urban Land Institute is a global, memberdriven organization comprising more than 45,000 real estate and urban development professionals dedicated to advancing the Institute's mission of shaping the future of the built environment for transformative impact in communities worldwide.

ULI's interdisciplinary membership represents all aspects of the industry, including developers, property owners, investors, architects, urban planners, public officials, real estate brokers, appraisers, attorneys, engineers, financiers, and academics. Established in 1936, the Institute has a presence in the Americas, Europe, and Asia Pacific regions, with members in 80 countries.

The extraordinary impact that ULI makes on land use decision-making is based on its members sharing expertise on a variety of factors affecting the built environment, including urbanization, demographic and population changes, new economic drivers, technology advancements, and environmental concerns.

Drawing on the work of its members, the Institute recognizes and shares best practices in urban design and development for the benefit of communities around the globe.

More information is available at uli.org. Follow ULI on Twitter, Facebook, LinkedIn, and Instagram.

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The goal of the ULI Advisory Services program is to bring the finest expertise in the real estate field to bear on complex land use planning and development projects, programs, and policies. Since 1947, this program has assembled well over 700 ULI-member teams to help sponsors find creative, practical solutions for issues such as downtown redevelopment, land management strategies, evaluation of development potential, growth management, community revitalization, brownfield redevelopment, military base reuse, provision of lowcost and affordable housing, and asset management strategies, among other matters. A wide variety of public, private, and non-profit organizations have contracted for ULI's advisory services

A major strength of the program is ULI's unique ability to draw on the knowledge and expertise of its members, including land developers and owners, public officials, academics, representatives of financial institutions, and others. In fulfilment of the mission of the Urban Land Institute, this report is intended to provide objective advice that will promote the responsible use of land to enhance the environment.

About Technical Assistance Panels

Technical assistance panels (TAPs) are an offshoot of ULI's notable Advisory Services program. Both TAPs and Advisory Services panels offer expertise and technical assistance for communities and organizations facing land use challenges. Panels rely on volunteers who combine their individual expertise with the resources of ULI to provide unbiased, neutral perspectives on land use and real estate issues.

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High-rise residential building in Hong Kong city.



EXECUTIVE SUMMARY

Innovation in Hong Kong's low-cost rental housing market may be used alleviate the challenges posed by subdivided housing units and other inadequate housing stock. As of 2022, more than 220,000 individuals were living in inadequate housing. The city has around 110,000 subdivided units (SDUs), which are mostly located in Kowloon and the New Territories. While many individuals and households are queuing up for public rental housing (PRH), the average waiting time is 5.6 years. In view of that, this technical assistance panel (TAP) aims to identify alternative private-sector solutions at a monthly rental of up to \$6,000*, intending to shorten the PRH waiting list and provide better-quality living at low cost in the inner city, as low-incomes occupiers tend to live closer to their work location.

New small rental units at affordable prices in newbuilt and refurbished buildings in urban areas can fill the housing gap for low-priority PRH queuers. The units would primarily be built by modular integrated construction (MiC) or design for manufacturing and assembly (DfMA) method to maximise construction efficiency. Whether the small rental units are newbuilds or refurbished buildings, the design should follow sustainable and low-carbon principles with a maximum plot ratio. Centralised building services and amenities can also be provided in the building to ensure the wellbeing of the occupiers.

In terms of the operation of low-cost rental housing, it is suggested a separate entity to the owner should be responsible for operational management. Because the rental units will focus on creation of social goods for the greater community, a social enterprise equipped with housing management and social services expertise may need to be formed as the operator.

To develop this new investment opportunity, it will be necessary to take into account various factors, such as government policy support and governance frameworks, the availability of organizations capable of managing this type of housing, and the refinement of the financial model to make it appealing to institutional investors. Government policy support may include favourable land premiums, flexible tenancy/lease agreements, and financial guarantees for development and construction. With the backing of the government, investors may be incentivized to invest in the product through green or social finance tools, which can provide a stable, long-term yield.

By creating a new investable product, the community will benefit from improved living conditions for residents, as well as increased tenure in these units. This initiative will also demonstrate the government's commitment to addressing the issue of SDUs. In addition, it is expected that small rental units like these will provide value to society, benefiting the community, government, and development companies through the creation of higher-quality housing, shorter PRH waiting lists, and shorter development cycles for asset enhancement in conversion projects.

BACKGROUND

Hong Kong has faced persistent shortages in both private and public housing. While efforts have been made to increase the supply of private housing in recent years, shortages are expected to continue until the completion of the New Development Areas (NDAs) along the Hong Kong/Shenzhen border, which will provide over 500,000 additional apartments. However, this project is expected to take 10 to 20 years to complete.

The public housing sector faces an even more severe shortage, despite the government's increasing the portion of land dedicated to public housing from 60 to 70 percent in 2019. The government's long-term housing strategy target for public housing was an average of 28,000 units annually between 2014 and 2022, but public housing completions totalled only 16,300 units per year in that time frame, resulting in a deficit of 105,300 units. While public housing completions reached 25,800 units in the 2022 financial year, this was largely the result of a backlog from the previous year.

According to local nongovernmental organization (NGO) Our Hong Kong Foundation (OHKF), public housing completions for the next five-year period ending in fiscal year (FY) 2027 will continue to fall short of the government's long-term housing strategy annual target of 30,100 units, with an estimated average annual completion rate of 21,100 units. For the following five-year period ending in FY2032, OHKF projects a completion rate of 40,200 units per year under a "business as usual" scenario. This higher estimate is based on the government's accelerated efforts in 2021 to rezone suitable land for residential development, much of which is expected to come from the NDAs. As a result, over a 10-year period, OHKF projects that there should be sufficient capacity to meet the government's public housing target.

Assuming no significant delays occur in the development of the NDAs and other major government land use initiatives, the consistent creation of public housing is important to ensure that the supply of public housing, which is heavily concentrated in the later years of the 10-year projection period, becomes a reality. Even if the government meets its long-term housing strategy target for public housing, however, this does not mean that demand for these units will have been fully met. Rather, demand will only have been reduced based on demographic factors. Currently, about 135,500 general applicants are on the waiting list for public housing flats, with an average waiting time of 5.6 years at the end of September 2022, which is a 24-year high.

Demographics of the low-cost housing market

According to the "Long Term Housing Strategy Annual Progress Report 2022," published by the Hong Kong Legislative Council in October 2022, 107,400 households were living in subdivided accommodation. "Subdivided units" refers to small, often illegally partitioned units within a larger residential building, which are typically rented out as low-cost housing options. These units are often cramped and lack basic amenities, and they may pose safety and health risks due to the lack of proper building and fire safety regulations. The number of households living in SDUs has been a source of concern in Hong Kong because of the poor living conditions and the potential for exploitation of tenants by landlords. These statistics do not include households that reside in substandard housing such as temporary structures, industrial and commercial buildings, rooftop structures, and so on. An estimated 127,500 households are living in these types of inadequate housing. SDUs are a common form of inadequate housing. These 127,500 households residing in inadequate housing represent around 4.8 percent of all households in Hong Kong. Many SDUs are quite small: 63 percent have a floor area of 13 square metres or less, and 50 percent have a floor area of 11.5 square metres or less. The median per capita floor area in these accommodations is 6.6 square metres.

Geographically, Yau Tsim Mong has the most SDUs with 21,500 units, followed by Sham Shui Po with 15,400 units, Kowloon City with 9,000 units, Eastern with 8,400 units, and Tsuen Wan with 6,600 units. SDUs in Hong Kong were distributed as shown in the figure.



Distribution of subdivided units by location

According to the *Report of Task Force for the Study on Tenancy Control of Subdivided Units*, published by the Hong Kong Transport and Housing Bureau in March 2021, SDUs typically have the following features:

SDU features	Percentage
Located in buildings that are 50 years old or older	81.9%
Have only one toilet (whether shared or independent)	99.3%
Have a shared or independent kitchen (i.e., an area with a freshwater supply and space for a cooking stove, either partitioned or not)	92.7%
Have independent electricity meters	85.8%
Have independent water meters	83.2%
Households have been residing in their current SDU for more than two years	About 56%
Households have applied for public rental housing	48.4%

According to the report, the majority of SDU households (over 85 percent) have a written tenancy agreement. Of these households, about 60 percent have agreements with terms of one to two years, whereas only about 10 percent have agreements with terms longer than two years. However, it is worth noting that these agreements may not provide full protection for tenants' rights.

The median monthly rent for SDUs is \$4,800, with a median monthly rent per square metre of \$417. The average monthly rents for domestic flats under 40 square metres in the New Territories and Kowloon, respectively, are \$301 and \$368 per square metre. The monthly rent for SDUs makes up about one-third of the monthly household income for these households. Most SDU households also have to pay for water and electricity in addition to their rent, with rates typically being based on usage. The median rate charged for water is \$13 per unit and \$1.50 per unit for electricity.

The median monthly income for households living in SDUs was \$15,000, compared to the median income for all households in Hong Kong of \$33,000 in the fourth quarter of 2020. While the proportion of SDU households earning less than \$6,000 per month in 2020 was 11.1 percent, which is slightly lower than the corresponding figure for Hong Kong as a whole (11.6 percent), only 37.6 percent of SDU households earned \$20,000 or more per month, significantly lower than the average of 60.3 percent for Hong Kong overall.

As of the end of 2020, the tenants of SDUs tended to be younger than the average for Hong Kong. Specifically, 16 percent of these tenants were under 15 years old, compared to 11.6 percent for the city as a whole. Similarly, 6.7 percent of SDU tenants were 65 years old or older, compared with 18.3 percent of the general Hong Kong population. SDU households tend to be smaller than the average in Hong Kong. As of late 2020, 38.7 percent of households living in SDUs were composed of a single person, compared to 20.6 percent for the city as a whole. In addition, only about 10.9 percent of households living in SDUs had four or more members cohabiting in the same unit, compared to 27.8 percent for Hong Kong overall. The average household size for SDUs is 2.0, compared to an average of 2.7 for the city as a whole.

Questions for the panel

The TAP aims to address the current situation of low-cost housing in Hong Kong. On the basis of where occupiers currently live and why, the panel will propose mechanisms for alternative solutions for permanent rental housing that is affordable and liveable. An initial high-level session will map solutions for permanent affordable and liveable housing that can be provided by the private housing market, as a supplemental solution to the government's public housing, for single-person or family occupiers who can afford no more than \$6,000 per month in rent.

The TAP was asked to address the following questions in its review:

- 1. What would these units look like in new builds?
- 2. What would these units look like in refurbishments?
- 3. What would the financing mechanisms look like, depending on the occupier?
- 4. What would the operational management model look like?

TAP process

ULI provided briefing materials to the panellists to equip them with background information for the TAP work session. During the TAP sessions, the panel conducted interviews with key stakeholders to help the panel gather further insights into the issues of low-cost rental housing. The stakeholder interviews provided the panel with input from 13 subject matter experts from the real estate, urban planning, and construction industries. The insights from these interviews deepened the panellists' knowledge of the area and the perspectives of its stakeholders. This feedback helped frame the context of a lowcost rental housing solution and informed the approach that the panellists took when making their recommendations.

DEFINING THE SCOPE

The objective of the TAP is to identify alternative private-sector solutions for single-person or family occupiers with a monthly rental up to \$6,000. It also targets owners and investors that would create a new asset class in Hong Kong that offers a long-term and stable yield.

Target market – occupiers

The low-cost rental units aim to close the gap in the market, with a majority of single individuals. These individuals or households typically would prefer to live in the inner city, which is located closer to their workplace or school. The potential occupiers are anticipated to come from one or more of the following categories:

Young singles: Represents young individuals who wish to leave their homes and enjoy their own personal space.

Older singles: Represents older persons whose partner might have passed away and who are not well served by the government.

Couples with no kids: Represents couples, such as newly wedded couples without kids, that are starting to build a new family.

Adults with jobs: Represents persons who can afford a small rental unit without the government's assistance.

Retirees who want to stay in the community:

Represents retirees who have been in the community in their early life but would like to downsize and stay in the community for retirement living.

People with physical mobility issues: Represents persons with physical mobility issues who would benefit from moving to better-quality housing that is located in the inner city, including proximity to healthcare services and more convenient living conditions compared to inadequate housing.

Income below the PRH limit: Represents persons who are currently on the PRH waiting list and are open to better-quality housing options with slightly higher but still affordable rents. By providing housing for these individuals, the private sector will be able to shorten the PRH waiting list.

Target market - owners

Various parties may invest in the development and construction of small rental units. They may be involved in the various stages of the product life cycle.

Non-profit organisations and social enterprises:

Non-profit organisations and social enterprises have a track record of operating similar housing options in Hong Kong. While they may not be the lead developer of the product, non-profit organisations could play a role in bringing operating management and social services expertise together in creating value for society.

Institutions: Institutions such as real estate investment trusts (REITS), pension funds, insurance companies, and core funds owners see opportunities in rental housing for a secure income, even though the yield may be lower than for other types of housing options.

Developers: Certain developers who already have relevant expertise in the area may be interested in such products. Developers may look into long-term ownership in demonstration of their corporate vision in creating social good.

PRODUCTS TO OFFER

Given the limited land supply in Hong Kong, new construction of private rental housing is not always feasible in the inner city. For a product that aims to shorten the PRH waiting list in the near term, rental housing options in a refurbished building could be considered as an alternative.

New builds

Considering the needs and expectations of targeted occupiers, new construction of low-cost rental housing should be located in urban or brownfield sites. Sites located far from the city centre may not be attractive to tenants due to the long commuting time to the workplace. The product aims to balance the economic and environmental perspectives that the building should be designed as a sustainable building with a maximum plot ratio. A plot ratio of 15, referencing the typical non-domestic plot ratio, would be preferable.

Modular integrated construction

Design for manufacturing and assembly (DfMA) has grown in importance in the construction industry: in particular, modular integrated construction (MiC) is widely used in building construction. To achieve a sustainable building design with lower cost, MiC has been actively promoted by the Hong Kong government. MiC is a relatively new type of prefabricated housing construction found increasingly in countries such as the Netherlands, the UK, Singapore, and Australia, providing cheap but reasonable quality housing. As in Singapore, which has a labour shortfall similar to that in Hong Kong, the use of prefabricated components for public housing has become more common. In particular, MiC has been slated for adoption in the development of NDAs by the Hong Kong government, with modular units prefabricated in factories largely located in Mainland China. MiC appears to be a suitable approach for use in the construction of lowcost housing throughout Hong Kong for a number of reasons:

Shorter time frame. MiC housing units can be constructed to be reusable, with buildings dismantled and moved to other sites for reassembly. This is a convenient attribute in Hong Kong because many sites are likely to be available on a short- or mediumterm basis because of long-term redevelopment plans created by either government or private-sector landowners. This might include sites in inner-city areas that are awaiting redevelopment.

MiC presents an advantage over typical timelines for residential developments involving demolition, land formation, and construction of new buildings. Typically, MiC housing units can be built on existing idle land in around one year.

Flexible design. A typical MiC unit usually houses between one and three people, with an average living space of no less than seven square metres per person, which matches the expectation of targeted occupiers. Within the module, each unit can be equipped with the essential facilities, including a selfcontained toilet, a bathroom with an electric water heater, and an open kitchen with an electric cooker. Windows can be fitted as required to provide lighting and ventilation requirements.

When looking into long-term and permanent structures, MiC has become a more popular option. In April 2021, the construction of the first MiC housing project in Hong Kong commenced, sponsored by the Housing Society. It involves a 10-storey, 64-unit home for seniors and is currently under construction on a 370-square-metre site at Jat Min Chuen in Sha Tin. The project is expected to cost \$88 million. The ground and first floors of the tower will be built using traditional reinforced concrete, while the second to ninth floors will feature 21-square-metre flats, each built from two prefabricated steel components. The Housing Society has stated that, by using MiC techniques, they will cut expected construction time from four years to two and reduce costs by some 40 percent.

Lower carbon footprint. By using MiC techniques, not only time and cost could be reduced, but also the carbon footprint of the building. With streamlined design and efficient production, MiC has several environmentally friendly benefits, for instance, the reduction of waste to landfills as a result of the streamlined production. Although it has not been tested comprehensively, MiC could be anticipated to reduce carbon footprint throughout the building's life cycle for several reasons:

- Building materials are saved and less waste is produced.
- Emissions from heavy machinery on the construction site are lowered.
- Recyclable materials are used in the production process.
- Lower emissions are expected from logistics, given the prefabrication factory is usually located near the construction site.



Close-up view of Hong Kong residential building.

Building information modelling

Alongside the MiC construction techniques, building information modelling (BIM) is also essential to maintaining the cost and time effectiveness of a lowcost rental housing product. BIM is a holistic process of creating and managing information for a built asset. It is usually equipped with a three-dimensional digital platform that captures multidisciplinary data to produce a digital representation of an asset across its life cycle. Based on an intelligent model, BIM is able to integrate information technology throughout the building management life cycle, enhancing productivity through better planning, design, work, and cost management.

Refurbished buildings

In view of the lack of land supply in Hong Kong, especially in urban areas, the refurbishment of existing industrial buildings, hotels, and offices may be a fast track to solving the housing shortage issue in the city. Previous city development means many of the existing buildings are located in urban areas such as Yau Tsim Mong, Kwun Tong, and Tsuen Wan. These areas are desirable for targeted occupiers given their proximity to commercial activities. Hotels are separately discussed from industrial and office buildings because of their different building features.

Industrial and office buildings

In 2018, the Hong Kong government announced that the city has a large number of unused or under-used industrial buildings that could be converted into transitional housing to accommodate low-cost tenants who would otherwise be forced to live in SDUs while waiting for new public housing to be built. Before this policy announcement, industrial units were not allowed to be used for residential purposes, although the government had previously identified instances of illegal conversions of industrial buildings into housing. This change was intended to address the shortage of affordable housing options in the city.

Industrial conversions have obvious appeal in that they harness what is otherwise a wasted resource. According to the Hong Kong Society for Community Organisation, a local NGO focusing on grassroots living standards, some 124 industrial buildings exist in Kowloon alone, a majority of them in inner-city locations that would be suitable for conversion into more than 18,000 housing units. Conversions are eligible for subsidies from the government's \$5 billion fund for supporting transitional housing projects, up to a ceiling of \$550,000 per flat.

However, the Hong Kong government has encountered challenges when implementing the policy. First, most industrial building owners would prefer to convert to uses other than low-cost housing, especially because a different government policy, already in place for several years, already allows them to convert to more lucrative uses such as hotels, co-living, or even data centres. Committing to low-cost housing for the five or more years required by the government initiative is therefore financially unappealing.

Second, authorities are having problems convincing building owners to accept lower returns even on a transitional basis. In December 2021, the first project approved under the industrial buildings conversion scheme, a 116-unit renovation in Kwun Tong, was cancelled after the NGO operator and the building owner were unable to agree on rental levels, as well as the proposed 10-year leasehold terms. Understanding the challenges that the government and the building owner face, one of the features proposed for low-cost rental housing is the composite use of buildings, where only part of the building is converted for residential use. Different from the transitional housing proposal, the selected areas in the industrial building are the proposed product of a long-term low-cost rental housing purpose, which targets occupiers who are willing to pay slightly higher rentals than PRH. Whereas the rest of the building could be converted for social services or commercial use, which allows a higher income yield, the rental units provide a longer-term and secure income source for the building owner.

Hotels

The lack of tourists and business travellers in recent years has had a serious impact on the hotel sector in Hong Kong. Although occupancy rates have recently rebounded as hotels find imaginative ways to fill their rooms, numerous hotels are now considering opportunities for conversion to other uses – especially those located in non-core areas, which have been hit especially hard by the absence of mainland tour groups.

Different from industrial and office buildings, hotels typically have a similar room structure to a small rental unit, such as the inclusion of a toilet and bathroom in the room. As of March 2022, some 14 hotels had changed hands since the onset of the COVID pandemic in early 2020, mostly for conversion to co-living, serviced apartments, or student accommodation. More conversion applications are in the pipeline. For example, CK Assets applied in June 2022 to the Town Planning Board to convert its 1,100room Harbour Plaza Resort City hotel in Tin Shui Wai into 1,102 flats.

Before that, in February 2021, both Novotel Nathan Road in Tsim Sha Tsui and Horizon Suite Hotel in Ma On Shan received approval from the Town Planning Board for 258- and 758-unit conversions, respectively, to residential units.



Flatmates having dinner together at home.

Interior

It is not only important to increase the supply of housing to meet demand and provide people with homes, but also to consider factors that make homes liveable. This includes ensuring adequate building quality and providing necessary services and amenities such as running water, common areas, and public spaces. The quality of housing and its effect on the quality of life become increasingly significant as the population of Hong Kong continues to age and people seek to "age in place". SDUs are often very small and lack proper ventilation and natural light, and occupants may live in poor hygiene conditions. It is important to address these issues in order to improve the overall quality of life for those living in these types of housing.

Regarding the interior design of the rental units, they should be designed for all ages and technologyenabled residents, where community-based facilities are available. The typical size of the rental unit varies based on the number of occupiers it could house, ranging from 14 to 28 square metres, that is, suitable for up to four persons. Whether the rental units will take up the whole building or part of the building, the co-living idea should be promoted in the building, and a portion of the floor area should be reserved for common facilities, including laundry room or kitchen. It allows the occupiers to enjoy personal space while sharing less frequently used facilities with other occupiers. Flexibility also exists to include additional bigger units for larger families if market conditions dictate a demand.

As the potential occupiers spend more time working from home, an adequate working environment is essential. This means workspace should be available and units should be technology-enabled, such as by providing internet access.

Number of occupiers	Size of units
1–2 persons	14 m ²
3-4 persons	28 m ²
 Design features: More smaller units than larger units Possible to include additional bigger units for larger f 	amiliae

Unit sizes and features

- ible to include additional bigger units for larger families
- Enable work from home
- Design features to include bed, bathroom, pantry, workspace
- 10 to 20 percent of total floor area for common facilities

Centralised services

Centralised services, particularly mechanical, electrical, and plumbing (MEP) services, in both new builds and refurbished buildings enable a lower operating cost. Moreover, overall workflow and building management could be benefited from centralised services:

- More efficient and use less energy consuming than individual units;
- · More easily maintained;
- Can be centrally controlled for further energy

savings, especially leveraging a modern building management system with sensors for occupancy and key indicators such as temperature, humidity, and ambient light;

- Can be monitored and metered/billed on a per unit basis (charged separately from the rent and can also be a profit centre, albeit small); and
- Enables cleaning up of the facade, removing individual split units which in turn reduces the urban heat island effect by moving heat rejection to the roof and freeing up the facade for potential greening.

Services listed below are some pointers for the owners to consider:

For new builds	 Replace individual air-conditioning units and water heaters with building-wide infrastructure. Centralise air-handling units and freshwater/hot water supplies. Centralise wi-fi for internet access.
For refurbished buildings	 Replace individual air-conditioning units and water heaters with building-wide infrastructure. Centralise air-handling units and ducting if already existing for air and water, otherwise new provisions required.

Amenities

To promote a co-living concept and living style, the rental units aim to create an environment that encourages bonding and communication among occupiers. Along with the personal space and certain facilities that are installed in the unit for privacy and hygiene purposes, other amenities that are less frequently used should be located in the common area. There should be a common space on every couple of floors to avoid overcrowding. These amenities include the following:

- · Café/living room;
- Kitchen;

- Laundry;
- · Activity rooms;
- Gym;
- · Additional storage;
- · Bike sharing; and
- · Personal mailboxes.

As the product targets occupiers who want to lower the cost of living, the panel assumes public transportation would be the major medium for commuting and no parking spaces will be included in the structure design.

Community

In addition to amenities within the building, community amenities should be provided at street level to create active frontages and open community orientation. The inclusion of various occupier groups in low-cost rental housing creates a more diverse community. The general public, the government, and the developer should all benefit from the community created.

For the public, low-cost rental housing not only serves as a residential development, but also provides additional facilities. The creation of better housing quality and the provision of community amenities improves the community and neighbourhood for the occupiers. As for the government, the solution is an alternative to current SDUs. When people are moving into low-cost rental housing, it is shortening the PRH waiting list at the same time. From the developer's perspective, there will be a shorter development cycle, particularly for conversion projects, which is beneficial for the developer's business planning. In addition, the nature of low-cost rental housing aligns with the corporate vision of creating social good.

Bringing value to society



RECOMMENDATIONS

In making the development of low-cost rental housing viable, and particularly if these projects are to be provided by the private sector or NGOs, a few changes in the current housing development framework are needed. Particularly, support from the government is the key to the successful development of low-cost rental housing. With the support from the government, the operators and investors will be able to manage and invest in the product in a stable environment.

Policy

Hong Kong is one of the most expensive cities in the world in which to rent residential property because of the shortage of land designated for residential development and the high demand from both domestic occupiers and immigrants. Private-sector participation in the creation of a low-cost housing market in Hong Kong is therefore challenging if based on free-market dynamics because yields are too thin to be attractive to private equity capital without any policy support.

Although comparing financing strategies used in other countries can be useful, it is important to note that the high cost of land and construction in Hong Kong compared to other markets means that innovative financing structures alone may not be sufficient to address the affordability gap in the housing market. To make a low-cost rental market viable in Hong Kong, some form of government subsidy may be necessary. Despite this, it is worth noting that the cost of borrowing in Hong Kong remains low compared to international standards.

Policy on land

Nominal land premium. The most obvious way to subsidise the cost of low-cost rental housing is to reduce or eliminate land premiums. Without financial assistance from the government in providing a nominal land premium, developers often find it challenging to build the project within a feasible budget. For example, the Lands Department has already adopted an official policy to exempt payment of waiver fees and associated costs for land applications related to the conversion of industrial buildings into transitional housing.

In 2022, two other interdepartmental task forces were created to expedite the supply of both land and public housing by streamlining development-related approval processes. Assuming the task forces are able to deliver on these promises, the potential increase in efficiency could be significant. The same approach could be adopted to help boost the supply of permanent low-cost housing, especially in light of how the government has prioritised the issue. With so many similarities between transitional and permanent low-cost housing, this could be achieved by expanding the authority of the above-mentioned transitional housing task force.

New land use class for private-sector rental.

Currently, no specific land use class exists for private-sector rental. Introducing a new land use class for low-cost rental housing can be important for a number of reasons.

First, it allows for the specific zoning of land for low-cost rental housing development. This can help ensure that land is set aside specifically for this purpose, rather than being used for other types of development that may not address the need for low-cost rental housing. The land can be priced accordingly. Second, a new land use class can help streamline the development process for low-cost rental housing. By clearly defining the requirements for this type of development, it can help reduce the risk of delays or obstacles caused by unclear or conflicting regulations.

Finally, a new land use class can help increase the supply of low-cost rental housing by providing a clear framework for developers to follow. This can encourage more developers to enter the low-cost rental housing market and help increase competition, which can in turn drive down prices and make housing more accessible to those in need.

Overall, introducing a new land use class for low-cost rental housing can help address the pressing need for this type of housing and contribute to the development of more liveable and inclusive communities. Inclusion in Column 1 of OZP for refurbished

buildings. Including affordable rental housing in Column 1 of the OZP (Outline Zoning Plan) would allow developers to convert existing industrial or office buildings into low-cost rental housing more easily. Currently, developers may need to go through the rezoning process or apply for a Section 16 in order to make such conversions. By including affordable rental housing in Column 1 of the OZP, these additional steps would be eliminated, streamlining the conversion process and making it easier for developers to create more affordable housing options. This could be particularly beneficial in areas where there is a high demand for affordable rental housing and a limited supply of available units. Simplifying the conversion process may make developers more likely to take on affordable housing projects, which could help increase the overall supply of affordable rental units in the community.



Residential buildings in Hong Kong.

Inclusionary zoning. Inclusionary zoning is a land use planning tool that requires or incentivises developers to include a certain percentage of lowcost rental housing units in their projects. This can be accomplished through a variety of means, such as requiring a certain percentage of units to be sold or rented at below-market rates, providing density bonuses, or giving other incentives for developers who include affordable units.

There are several potential benefits to inclusionary zoning:

- Increasing the supply of low-cost rental housing: By requiring or incentivising developers to include affordable units in their projects, inclusionary zoning can help increase the overall supply of low-cost rental housing, particularly in areas where market forces alone are not sufficient to create such units.
- Promoting mixed-income communities: Inclusionary zoning can help create a mix of housing types and incomes within a community, rather than having exclusively high- or low-cost neighbourhoods. This can help reduce segregation and promote social cohesion.
- Reducing housing cost burdens: By providing access to low-cost rental housing units, inclusionary zoning can help reduce the burden of housing costs on lower-income households and prevent them from being priced out of certain neighbourhoods.
- Encouraging economic diversity: Inclusionary zoning can help attract a diverse range of businesses and employees to a community, as it provides housing options for occupiers at different income levels. This can help support the local economy and create a more vibrant community.

Lease conditions to mandate long-term rental.

Mandatory land-lease conditions for affordable housing are requirements that developers must meet in order to obtain land leases for their projects. These conditions can require developers to include a certain percentage of affordable housing units in their projects or to meet other criteria related to affordability.

By establishing clear and predictable requirements for affordable housing, mandatory land-lease conditions can help reduce uncertainty for developers and make it easier for them to plan and finance their projects.

Policy on building

Service agreement in addition to the land lease.

The inclusion of a service agreement in addition to a land lease allows for the partial conversion of office buildings with low foot traffic and limited semi-retail use. Traditionally, industrial buildings are considered inadequate for living due to their design. To assure the living quality of occupiers, the service agreement should specify a minimum number of units to be provided by floor, by unit size, or by a percentage of the gross floor area to create an appropriate scale of residential community. In addition, the service agreement should include compulsory requirements for common amenities to be provided in these converted buildings. These changes aim to increase the housing supply and create more diverse and liveable communities.

Building code exemptions for refurbishment.

The proposed building code exemptions relax the requirement for natural ventilation and light for rooms, allowing a more flexible design. In addition, the proposed exemptions allow maintaining the maximum plot ratio of 15 irrespective of site coverage, for the conversion of non-residential buildings into residential buildings. This change will give developers more flexibility in their designs and potentially increase the density of residential buildings. Currently, rooms in the building are required to have a certain amount of natural daylight and ventilation. However, when converting industrial buildings, it may not be possible to use natural daylight in every room. Therefore, a relaxation of relevant regulation is required. In addition, other regulations reduce the plot ratio of buildings when they are converted to residential use. This can make the project financially unviable. To maximise the feasibility of low-cost rental housing projects, an exemption to regulations in limiting plot ratio under the Building (Planning) Regulations should be applied, to allow the building owners to maintain the original, higher plot ratio in refurbishment. Under the current Building (Planning) Regulation, a higher plot ratio allows for taller and thinner buildings. However, a relaxation to this regulation could make use of certain industrial buildings that may not meet these requirements.

Encourage composite use of buildings. When considering conversion of buildings for residential purposes, it is important to take certain factors into account. For instance, when converting office buildings, it may be advisable to prioritise those with low foot traffic and limited semi-retail uses, such as beauty salons or education centres, as these may be more suitable for living in terms of lift use and fire escape regulations. In the case of industrial buildings, it may be advisable to prioritise those that are used for only light industrial purposes, to provide more sanitary living conditions. It may also be helpful to specify a minimum number of units that must be provided in these composite buildings to foster a sense of community among residents. This requirement could be based on the number of units, the unit size, or a percentage of the gross floor area. In addition, it may be advisable to include amenities such as laundry facilities and kitchens in these buildings.

Another way to cut costs is for the government simply to subsidise construction. This is likely to cover most cases because the biggest land-related expense is likely to involve a change of use. This is a common policy in other jurisdictions, including Singapore, where the government's Housing and Development Board accepts an operational loss in constructing public housing. A similar approach has already been adopted in Hong Kong for the construction of transitional housing, with the government offering a funding ceiling of up to \$550,000 per unit built in vacant buildings. It would be logical to assume the government would similarly subsidise privately constructed low-cost housing so long as it met the required criteria.

Other support

The government can support the development of lowcost rental housing by providing a property sandbox for pilot projects. A property sandbox is a regulatory framework that allows for the temporary suspension of certain rules and regulations in order to test and evaluate innovative housing models and solutions.

By providing a property sandbox, the government can create a space for developers and other stakeholders to experiment with new approaches to low-cost rental housing development, without being constrained by the current regulatory barriers. This can help identify effective and viable solutions that can then be scaled up and implemented more widely. Through this approach, the government can play a proactive role in supporting the development of low-cost rental housing, rather than just reacting to proposals that are brought to them. This can help drive innovation and find new ways to address the housing affordability challenge.

Operations

While developers may develop and own the product, often they delegate the operations to other property managers and experts in the operation stage. Given the uniqueness of low-cost rental housing, additional expertise in social services is required. The panel proposes that low-cost rental housing is operated by a distinct organisation that is separate from the owner, where a new form of social enterprise could be formed. The operating entity should possess the necessary expertise in housing management to ensure the efficient operation of the units. It is to ensure the operation is organised and licensed in a proper manner, with appropriately trained staff.

Tenant income eligibility is assessed using the standards established by the Housing Authority. The lease term is recommended to be a minimum of five years, with an annual review based on the Consumer Price Index and renewal by mutual agreement. The rental payment would include management expenses, and the option could exist to include additional centralised utilities and services.

The operation should offer social services provided by NGOs to support the tenants, as well as one or two in-house trained property managers. There should also be a tenant community leader who could assist in facilitating communication and addressing any issues within the community.



Roles of parties in financing the product

Finance

Finance is a critical aspect of this type of project, and its success will depend on the involvement and support of the government. Throughout the product's life cycle, various parties will be involved, including the government, the developing entity, the investors, and the operating entity. Each of them plays an essential role in the product and has their own concerns in terms of the financials.

One way in which the government can provide support is by offering a nominal premium and entering into a service agreement with the owner. The government can also provide a financial guarantee for the development and construction of the project through the Hong Kong Monetary Authority, which can help secure financing from banks and investors.

As for the banks and investors, the project could be financed through green finance or social finance tools because of the sustainable features of the building and its social impact for society. Tools such as green loans or sustainability-linked loans allow financing the project from a sustainability perspective where environmental performance and benefits are used as indicators and targets in the use of proceeds. Alternately, social impact loans could be issued based on the value creation of community amenities previously mentioned.

The development entity can then use this financing to construct the project and has the option to sell it to another investor or retain ownership of the property and generate long-term but stable returns for institutional investors such as pension funds.

A separate operating entity will be responsible for managing the property, and initial calculations show a net income of approximately \$5,000 per month, with a construction cost of around \$2 million. This yields a return of about 3 percent, which may be attractive to long-term investors.

NEXT STEPS

The panel conducted a high-level discussion on private-sector solutions to low-cost rental housing. However, the ideas proposed are yet to be tested. Going forward, ULI Hong Kong will conduct a more in-depth analysis of the options identified in the TAP. This will involve identifying urban areas where the proposal is likely to be effective, based on certain criteria for a successful demonstration site. The indepth analysis will also explore how to incorporate environmental, social, and governance (ESG) elements into the proposal. Furthermore, ULI will look to move forward with building a sample unit by identifying a site and constructing the proposed unit. ULI would create a mapping mechanism to demonstrate how the proposal can be scaled up and replicated in other areas. The success of the mapping mechanism will require the involvement of various stakeholders to ensure the successful implementation of the project.



Hong Kong city.

ABOUT THE PANEL

David Faulkner

President, ULI Asia Pacific Panel Chair

Faulkner is a chartered surveyor with over 40 years of experience in the real estate industry. He retired from his most recent position of managing director at Colliers International in December 2019, where he was responsible for the 250-person valuation and advisory services team in 14 markets. He has been based in Asia for over 35 years, joining Colliers International in 2003 after 15 years with Insignia Brooke. Faulkner has advised on projects in Hong Kong, China, and many markets in the region, including North Asia, the ASEAN countries, South and Central Asia. He has expertise in all the major sectors including residential, commercial, retail, industrial, hospitality, and leisure.

He has been a ULI member since 2001 and is currently a trustee. Before joining the private sector in 1988, Faulkner spent nine years with government, both in the UK and Hong Kong.

Margaret Brooke

Chief Executive Officer/Director Professional Property Services Limited

Professional Property Services (PPS) provides specialist real estate consultancy services in Hong Kong, China, and across the Asia Pacific Region. Brooke is responsible for the preparation of the firm's wide range of consultancy assignments. As co-founder of Very Hong Kong and Collaborate Hong Kong, she has contributed significantly to their work in assisting other NGOs to envisage and implement bottom-up planning of unused or underused sites across the city.

As a director of the Business Environment Council (BEC), a well-respected not-for-profit organisation established to promote environmental and sustainability best practice in the business sector in Hong Kong, Brooke contributes to harbourfront planning and is a member of the Harbourfront Commission. As chair of the Harbour Business Forum she has also overseen the preparation of a number of research studies. As co-founder and chair of Heritage Hong Kong Foundation Limited, she has been responsible for a range of papers on heritage conservation and management in Hong Kong as well as contributing to pro-active efforts to protect and conserve the city's built heritage, including the Blue House Cluster, Tai Kwun, and the Chicago Booth Centre. She is also actively involved in efforts to promote improved harbour-front planning in Hong Kong and is a member of the Harbourfront Commission. As chair of the Best Practice Committee of the Harbour Business Forum (a BEC initiative), she has overseen the preparation of a number of research studies.

Ryan Ip

Vice President and Co-Head of Research Our Hong Kong Foundation

Ip is the vice president and co-head of research at Our Hong Kong Foundation. He manages the research department of the foundation to conduct in-depth research and advise the Hong Kong Government on area of land and housing supply, urban planning, as well as elderly and health policy. He was invited to speak at various investor forums, professional seminars, and academic panels, and is an active commentator on newspaper, radio, and television.

He is also a member of the Hong Kong Government's Land and Development Advisory Committee, Executive Committee member of the China Real Estate Chamber of Commerce Hong Kong and International Chapter, International Advisory Committee member of the Research Institute for Land and Space at the Hong Kong Polytechnic University, and board member of the Hong Kong Proptech Association. Before joining OHKF, he was an economist at JLL and Hong Kong Monetary Authority. He holds a master of science degree in economics at the London School of Economics and is a Chartered Surveyor.

Eli Konvitz

Expert in sustainable urban development

Konvitz is an expert in sustainable urban development. His experience around the globe includes plans and initiatives for new and revitalised places, large-scale urbanisation and regional strategies, climate change strategy and policy, master planning for transit-oriented development, reclamation and waterfront development, industry, tourism and leisure projects, and pioneering creation of a mechanism in the UK for low-carbon retrofit of existing buildings. Most recently he was director of Atkins' Planning and Urban Design practice in Hong Kong and South East Asia and Net Zero leader for Asia; regional practice lead for Consulting, Strategy and Advisory; and chair of Atkins' Urban Planning Global Network. He is currently an adjunct associate professor at the University of Hong Kong and a member of the advisory board of AMRACE (the Advanced Manufacturing Robotics Accelerator Centre of Excellence) in Malaysia.

He is chair of the programming and events committee and a member of the executive committee at ULI Hong Kong, sits on the Hong Kong Institute of Urban Design's public affairs and international and mainland affairs committees, and was previously chair of the International Infrastructure Forum's net zero working group at the British Chamber of Commerce in Hong Kong. A graduate of The Johns Hopkins University and the University of Newcastle upon Tyne, Konvitz is a Fellow of the Royal Society for the Arts.

Christopher Law

Founding Director The Oval Partnership

Law is an acknowledged leading expert and practitioner on sustainable urbanism. He advises governments and the corporate sector, and he contributes at academic and professional conferences on the subject. He is an ardent supporter of community participation and encourages this form of engagement across social, ecological, and economic capital aspects in the place-making process.

He founded the Oval Partnership with Patrick Bruce in 1992 and is a director of its subsidiary, the sustainable and smart city action research group INTEGER, which develops many ground-breaking initiatives in sustainable development, notably the world's first in the use of structural laminated bamboo in multi-storey buildings. Under his leadership the Oval Partnership developed the Open City design principle and transmedia narrative methodology, manifested in the awardwinning Sanlitun Taikoo Li Beijing and Sino-Ocean Taikoo Li Chengdu projects. Law is member of a number of public-sector committees in Hong Kong, including the Antiquities Advisory Board, the Urban Design Advisory Group and the Community Involvement Committee on Greening of the Development Bureau, and the Development Committee of the West Kowloon Cultural District. He is chairman of the UNESCO top award-winning heritage conservation and community participatory Viva Blue House in Hong Kong, and chairman of the Community Development Committee of the St James' Settlement. He is the chief curator and founder of the public space action research organization Very Hong Kong and its community land place-making initiative, Collaborate Hong Kong. The Venice Biennale Hong Kong Pavilion 2012 on urban regeneration of Kowloon East, curated by Law, was selected as one of the top five globally by the Architects' Journal.

A graduate of Stonyhurst College and the Bartlett School of Architecture UCL, Law and his projects have received awards from the Royal Institute of British Architects (RIBA), the Royal Academy of Arts, the Hong Kong Institute of Architects (HKIA), the Hong Kong Institute of Planners, the Hong Kong Institute of Urban Design, Urban Land Institute, and World Architecture Festival. He is a Fellow of the HKIA, a member of the RIBA, and was made an honorary member of the American Institute of Architects for his contribution to architecture. He is a justice of the peace of the Hong Kong SAR.

Edward Law

Managing Director CTL Group

Law is the managing director at CTL Group and project director at Yu Tai Hing Company Limited. With over 1,000 keys under the CTL group's hotel and serviced apartment portfolio, he oversees daily operations, marketing, and sales for hotels and residences. Brands under CTL group include Urbanwood Hotels, Bridal Tea House Hotels, Forward Living, The Grand Blossom, and South Nest. As the project director for Yu Tai Hing Company Limited, a property development company established in 1966, Law is responsible for monitoring progress on construction, leading the in-house architectural team on company projects and property investment for sales and leasing.

Kristine Li

Senior Deputy General Manager Portfolio Leasing Henderson Land Development Company Limited

Li is the senior deputy general manager of Portfolio Leasing Department at Henderson Land Development. She oversees the group's investment properties in Hong Kong and led the launch of the group's new "H Commerce" series of thematic commercial developments, including that of H Queen's, the first vertical, purpose-built gallery building in Hong Kong; H Code, for leisure and lifestyle, and H Zentre for premium medical and wellness.

Li holds a master of science in real estate from the University of Hong Kong and a BA from Stanford University, USA. Before joining Henderson Land, Li worked in the investment banking industry. She has over nine years of experience in the property leasing, marketing, and asset management field. She currently serves on the Global Governing Trustees of Urban Land Institute and is also a member of the Y.Elites Association and Hong Kong Pei Hua Education Foundation as well as a committee member of the Union Hospital Charity Program. Li is also the founder of HART, a not-for-profit arts community organization.

Michele Lui Wing Chi

Manager (Business Development) Hip Hing Construction Co. Ltd.

After graduating from the Hong Kong Polytechnic University majoring in building engineering and management (honours), Lui joined Hip Hing Construction Co. Ltd. as a management trainee in 2012 and participated in several significant projects, such as electrical power substations, Xiqu Centre at West Kowloon Cultural District, Grade A office tower and luxury residential projects.

Lui is in charge of a few recent MiC projects, namely InnoCell and Temporary Quarantine Facilities at Pat Heung and Penny's Bay Phase 3A for the Hong Kong government, which have over 1,400 MiC modules in total. She recently received the chief executive's commendation 2022 in recognition of her contributions to the construction industry. She is also the awardee of RICS Hong Kong Young Achiever of the Year 2021, CIOB Construction Manager of the Year 2020, and CIC Outstanding Construction Manager Sustainability Award 2020.



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