

Analysis of Operation Mode of Government-subsidized Rental Housing-The example of Company A in the Lin'gang New Area

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Abstract: At the end of 2015, after the State first proposed "both housing purchase and renting" at the Central Economic Work Conference, the construction of the rental housing system has continued to improve. At the end of 2015, after the country first proposed " both housing purchase and renting" in the Central Economic Work Conference, the construction of the government-subsidized rental housing system has been continuously improved, and in 2021, under the background of the successive implementation of supportive policies for government-subsidized rental housing and the continuous regulation of the market industry, government-subsidized rental housing operating enterprises have evolved from a single operating mode to Open composite model. This paper takes the experience of Company A in the Lin'gang New Area in the process of operating government-subsidized rental housing as an example to provide reference for enterprises involved in the construction and operation of government-subsidized rental housing. This will help younger and citizens better lived and resided.

Keywords: Government-subsidized rental housing, Operating model, Heavy asset, Medium asset, Light asset.

1. Introduction

In 2016, the State Council promulgated the Opinions on Accelerating the Cultivation and Development of the Housing Rental Market, which insisted on " both housing purchase and renting, cultivating and developing the housing rental market" as one of the core long-term mechanisms of China's real estate market. After the 19th National Congress of the Communist Party of China was held, institutional policies on the cultivation of market players, financial innovation, participation of insurance capital and tax concessions were put forward one after another, with the State guiding and encouraging the cultivation of the rental housing market. In November 2020, the proposal of the Central Committee of the Communist Party of China on the formulation of the 14th Five-Year Plan for National Economic and Social Development and the Visionary Goals for the 2nd and 3rd Five-Year Plan proposed: "We must remember that housing is for living in, not for speculation." Build a housing system that combines renting and purchasing, and that is tailored to the city, promote the stable and healthy development of the real estate market, improve the mechanism for distributing revenue from land concessions, explore support for the use of collective construction land to build rental housing in line with the plan, improve long-term rental housing policies, and expand the supply of government-subsidized rental housing.

In August 2021, the Fourteenth Five-Year Plan for Housing Development in Shanghai sets out the following overall development goals: With the goal of having a livable home, we will continuously improve a housing system that ensures supply through multiple sources, provides housing support through multiple channels, and encourages both housing purchase and renting, build a solid bottom line of housing livelihood protection, strengthen the precise supply, system supply, service supply and quality supply of housing, and further meet the multi-level, functional and quality housing needs. The first key task is to continue to build a housing rental system, accelerate the promotion of effective supply of

rental housing and increase the promotion of secure rental housing. The first major task is to adhere to the rental and purchase, and build a housing rental system, which vigorously promote the effective supply of rental housing, the main elements are: improve the way to raise rental housing, improve supporting services and facilities, and improve the quality of rental housing. The construction of new urban areas can play a leading role in planning, layout and construction of a number of rental housing, to create a pilot demonstration area of the rental-purchase housing system; explore the pilot construction of rental housing on collective construction land, revitalize idle residential bases and other housing resources, support the conversion of stock houses into rental housing in accordance with regulations; strengthen the role of the main market, mobilize all kinds of social entities to actively participate in the construction and operation of rental housing, etc., specifying the path of financing of protected rental housing and encouraging enterprises to enter the rental housing industry.

This paper takes the government-subsidized rental housing project in the new area, in which Company A is involved, as an example, to study and explore the operation mode of government-subsidized rental housing based on the guiding ideology of policy documents, in an attempt to provide reference for the development of government-subsidized rental housing operation enterprises in the Lin'gang New Area.

2. Introduction of Company A

At present, China's rental housing industry is divided according to the degree of capital investment of enterprises and the operation mode of rental housing mainly includes three modes: heavy asset mode (holding and operation), medium asset mode (leasing and operation) and light asset mode (entrusted operation).

Company A is a state-owned real estate development enterprise in the Lin'gang New Area, which actively participates in the investment, construction and financing,

supply and lease management of the government-subsidized rental housing in accordance with the requirements of the new area. At present, Company A has more than 15,000 sets of government-subsidized rental housing, of which more than 13,000 sets have been supplied, and the rest will be supplied one after another during the 14th Five-Year Plan period. Among the supplied government-subsidized rental housing projects, three modes of operation, namely, heavy-asset, mid-asset and light-asset, have been adopted according to the nature of project ownership.

The heavy asset operation model is represented by Y Community Apartments, the medium asset operation model is represented by D Apartments, and the light asset operation model is represented by K Housing. All three projects are located in the Area 101 of Shanghai Lin'gang New Area, which is less than 3 km away from each other and belongs to the same location with similar quality of housing projects. Area 101 is described as the "Nanjing Road" area of the new area, which is one of the major leisure and commercial centers of the new area. Within the area, there are Line 16 Lin'gang Avenue, Dishui Lake rail station, shopping and dining complex town, Haichang Ocean Park, Planetarium, etc., which provide a strong guarantee for transportation, life and entertainment.

3. Supply Requirements for Government-Subsidized Rental Housing

3.1. Supply populations

According to the policy requirements of the Lin'gang New Area of government-subsidized rental housing, the individual access conditions require that they do not purchase restricted commodity houses or commodity houses in the Lin'gang New Area, and do not rent other government-subsidized rental housing in the Lin'gang New Area; at the same time, the work unit of the leasing population must meet the access conditions of the business registration, production and operation, and financial and tax account management, one of the three places in the Lin'gang New Area.

3.2. Supply standard

Families of less than three people and single people can rent two-bedroom and the following type of housing, more than three people (including three) can rent three-bedroom and the following type of housing. Unit collective tenancy can be divided into sets of sub-divided rooms for rent, but the per capita living area of the occupants shall not be less than 5 square meters.

3.3. Rent Price

According to the policy requirements of government-subsidized rental housing, the rent price (one room, one price) shall be set by the rental unit to determine initial pricing and price adjustment, and then should be put on record to the district housing management department where the project is located and announced to the community, and the actual implementation of the rental price shall not be higher than the recorded price. The rent price of government-subsidized rental housing for public supply is less than 90% off the rent of the same lot and the same quality of market rental housing, and the annual increase is not higher than 5%.

3.4. Time limit of lease

Government-subsidized rental housing contract should not be shorter than 1 year in principle, the longest not more than 3 years, to encourage the rental unit and the tenant to sign a 2-year or 3-year lease contract, the lease contract expires, the occupants after re-examination still meet the conditions of access, the lease can be renewed, no longer meet the conditions, should be withdrawn.

4. Operation Mode of Government-subsidized Rental Housing

4.1. Asset-heavy operating model

Y Community Apartments was invested and developed by Company A in 2016, and was listed and supplied as government-subsidized rental housing at the end of 2018. The project adopts the "asset-heavy operation mode", i.e. after the development and construction is completed, the Group's operation team will carry out the whole process of community-based operation and management of the housing project, including investment, tenant services, property services and other operation work.

4.1.1. Household design

Y Community Apartments has a total construction area of 114,200 square meters and a total number of 1,637 units. The house types are designed as follows: the main house type with one room and one hall, the area range is 40-60 square meters; the classic house type with two rooms and one hall is 70-80 square meters; the quality house type with three rooms and two halls is 90-110 square meters; the fine house type with four rooms is 120-140 square meters; the ratio of the above house types is 6:3:1.5:0.5 in order to realize the housing security needs of singles, families and some high-end talents.

4.1.2. Project Configuration

The apartments in this community are finely decorated and fully equipped with necessary furniture and facilities, such as beds (including mattresses), closets, dining tables and chairs, gas stoves, hoods, water heaters, refrigerators, etc., to achieve turnkey standards.

The community is equipped with a service center for public services, and a centralized cafeteria, a book bar, a mini-market, a gymnasium, and other relatively sound living support services to meet the basic needs of quality living for the guaranteed population.

4.1.3. Operations Management

The adoption of systematic management for the management of asset-heavy operation is one of the important means to achieve cost reduction and efficiency improvement. By building a digital platform, it can realize online housing management, tenant management, contract management, etc.; it can view the housing in-rent situation in real time, handle occupancy, lease renewal, room exchange and rent refund online, support contract signing online, pay rent online, etc. On the basis of the above-mentioned conventional functions, the digital platform supports online viewing and payment of water and electricity bills of leased houses, i.e. there is no need to purchase and install additional intelligent water and electricity meter equipment, and only ordinary residential water and electricity meters can be installed, which gives tenants a "home" living experience and greatly reduces construction investment costs.

The asset-heavy operation of the premises facilitates intelligent community construction, and the development of the digital twin platform completes intelligent community services such as visitor reservation, vehicle management, patrol inspection, and charging resources to enhance the community management energy level and achieve safe service management.

This model makes full use of the community advantages of the asset-heavy operation project, takes community management as the highlight of the operation service, and plans and organizes special community activities, such as three-on-three basketball league, choir, drama club, theme salon, etc., which can increase the high participation and satisfaction of tenants and maintain tenant stickiness.

4.1.4. Operating Costs and Benefits

Y Community Apartments is a purely self-owned project, i.e. it cannot be sold or transferred during the land use life, and is held for the whole life cycle; also as an asset-heavy operation model project, the total cost of the project mainly comes from three major parts: land cost, construction cost and period cost; the average operating cost accounts for 6% of the total cost of the project during the operation period.

Since its operation, the average occupancy rate of Y Community Apartments has been maintained at over 95%, and the ratio of operating costs to rental income has been maintained at around 15%. Based on the total project investment and current rental income, the project payback period is nearly 37 years as measured by the project cash flow statement; the average annual net operating profit margin is expected to be about 0.63% and the average annual return on investment is about 2.28% at the end of the project's full life cycle.

4.2. Mid-Asset Operating Model

Apartment D project is located in a general commodity residential community, which was developed and constructed by a well-known domestic real estate development enterprise at the end of 2017 and delivered at the end of 2019, with a total residential construction area of 77,300 square meters and a total of nearly 900 residential units; among which, Apartment D project has a total construction area of 11,000 square meters, with 2 buildings of centralized elevator townhouse residences and simple decoration delivery.

4.2.1. Household design

The total number of units in Apartment D is 146, all of which are ordinary commercial residences with two rooms and one hall; the floor area of a single unit is about 75 square meters, with independent balcony and independent kitchen and bathroom, which is suitable for family and suit-splitting rental housing of unit

4.2.2. Project Configuration

The project is a simple delivery, i.e. the interior hard furnishings are completed and all the hoods, gas hoods, kitchen hanging cabinets, flooring, basins, toilets, etc. are installed.

The project is located in a small area with public configuration of property management rooms, public greenery, senior activity rooms, cultural activity rooms, fitness points, parking spaces and other regular public space and service facilities for ordinary commercial housing.

4.2.3. Operations Management

Apartment D project serves as a medium-asset operation model of government-subsidized rental housing, i.e.,

Company A leases the whole project from the owner of Apartment D project, then standardizes the renovation and configuration of the project, and then leases out the supply for a second time. The operating agency is responsible for the operation and maintenance during the leasing period; it pays a fixed rent to the housing ownership and earns the rental difference.

Apartment D project is incorporated into the information management platform of government-subsidized rental housing as a government-subsidized rental housing project. The operating agency provides tenants with contract signing, occupancy processing, lease renewal, rent withdrawal, bill collection, daily affairs processing, as well as operation services such as common area cleaning, intelligent access control, intelligent door lock and housekeeping services.

4.2.4. Operating Costs and Benefits

The total project cost of the D Apartments project, which is operated under the medium-asset operation model, comes from the cost of storage and leasing of the properties, the cost of standard decoration and configuration, and the operating cost. The average operating cost accounts for approximately 24% of the total cost over the project's operating period.

After the supply of Apartment D project was listed, the average occupancy rate was always above 95%, and the ratio of operating cost to rental income, was about 21%. The project's revenue mainly comes from the rental spread, measured by the current lease term and rental spread, and the project's investment payback period is nearly 5 years as measured by the project's investment cash flow statement; the average annual net operating profit margin is expected to be about 14%, and the average annual return on investment is about 16%.

4.3. Light-Asset Operating Model

K housing project is located in the general commodity residential district, which was developed and constructed by the real estate development enterprise in 2016 and delivered in 2018, with a total residential construction area of 120,000 square meters and a total of more than 1,300 residential units, of which K housing project has a total construction area of 0.6 million square meters, and is 2 centralized elevator townhouse residential buildings with finishes delivery.

4.3.1. Household design

The total number of units in the K housing project is 106, with the following house types: one-bedroom type with an area of 59 square meters and two-bedroom type with an area of 73 square meters; the ratio of house types is 2:1, i.e. one-bedroom type is the main house type and a small number of two-bedroom type, which is suitable for single and family-type people to rent.

4.3.2. Project Configuration

The apartments are fully furnished with necessary furniture and facilities, such as beds (including mattresses), closets, dining tables and chairs, gas stoves, hoods, water heaters, refrigerators, washing machines, air conditioners, etc. The apartments are fully furnished to achieve the turnkey standard.

The project is located in a community with public configuration of property management rooms, public greenery, senior activity rooms, cultural activity rooms, fitness points, parking spaces and other regular public public space and service facilities for ordinary commercial housing.

4.3.3. Operations Management

K housing projects for ordinary commercial residential

communities with guaranteed rental housing, provided by the real estate development enterprises after the completion of construction, free of charge to the district government. Company A is entrusted by the government housing authority to operate and manage the K housing project, and receives operating service fees, which is an asset-light operation model. During the operation period, the government housing authority will assess various key operational indicators of Company A, such as management services, safety and security, rent collection rate, room occupancy rate, and tenant satisfaction.

Company A has equipped the project with a professional operation team, established a perfect operation and management service system, optimized the service process through an intelligent management platform, provided tenants with efficient, convenient and safe operation services, and

improved the tenant satisfaction rate.

4.3.4. Operating Costs and Benefits

The total cost of the K-House project, which is operated with light assets, is the operating cost, including personnel cost, office type cost, information service cost and promotion type cost, etc.; the operating income comes from the government's purchase service fee. After completing the operation assessment target, we basically achieve a little profit or no profit.

5. Comparative Analysis of Operating Models

5.1. Household design

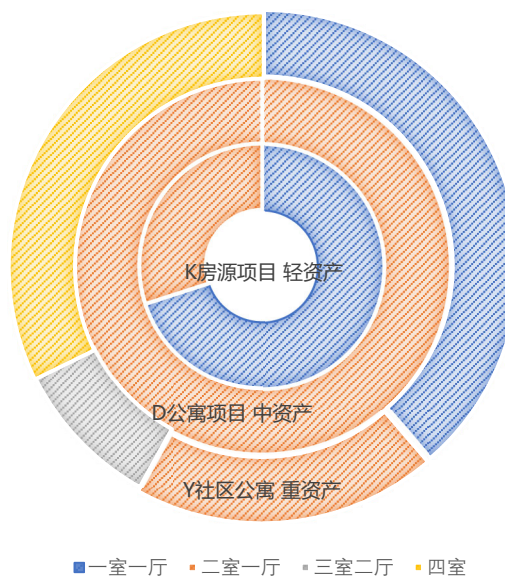


Figure 1. Comparison of house design

一室一厅 One-bedroom

二室一厅 Two bedrooms and one bathroom

三室二厅 Three bedrooms and two bathrooms

四室 Four-bedroom

Y 社区公寓 重资产 Y Community Apartments /Heavy Assets

D 公寓项目 重资产 D Apartment Project /Medium Assets

K 房源项目 轻资产 K Housing Projects /Light Assets

When comparing the house type designs of the three operation modes (Figure 1), we can see that the housing projects in the asset-heavy operation mode have a richer housing structure, mainly due to the integration of "investment-build-operate" in the asset-heavy operation projects and the customization of housing from the operation point of view, from project planning and positioning to housing type design, all of which are designed to meet the market demand and provide diversified rental products to ensure the housing requirements of multiple groups.

The condition of the housing units in projects operated by the mid-asset model depends on the nature of the housing

units, delivery conditions and operating revenue. Take this article's D apartment project as an example, if renovation of the housing structure is carried out after delivery as ordinary commercial housing, the mid-asset operator will increase the renovation cost and reduce the period of rentable housing, which will have an impact on the overall revenue during the operation period. In addition, renovation and modification of the project's house types require permission from the housing owner.

In the asset-light operation mode, the operator, as the exporter of operation management services, only provides operation services for the existing housing projects. If the housing project is in the early stage of development and construction, the operator of the light asset project is allowed to participate in advance, and the operator of the light asset can provide technical support for project development, such as house type design and house type ratio, based on its specialized operation experience and its brand standardization perspective.

5.2. Project Configuration

Table 1. Comparison of the configuration of government-subsidized rental housing projects under different operation modes

Examples	Y Community Apartments	Apartment D	K Housing Project
Operating Model	Heavy Assets	Medium Assets	Light Assets
Configuration of public areas	Regular configuration of residential communities Cafeteria Book bar Mini-market Gymnasium Integrated service center	Conventional configuration for residential communities Service Center	Conventional configuration of residential communities

Note: In the policy for the supply of government-subsidized rental housing, there are uniform requirements for the indoor configuration of guaranteed rental housing listed for supply, so no comparative analysis will be made.

From Table 1, we can see that Y Community Apartments, as an asset-heavy operation model, has richer and more diverse common area support, which originates from the operation model of the project. According to the pre-project positioning, the established concept of community operation, targeted common area support is set up in the community to provide hard support for the project after operation.

Projects in the medium-asset operation mode, because their revenue is mainly to earn rental price difference, sacrifice rentable area in exchange for common area allocation, need to accurately measure whether the marginal benefit of common area allocation is greater than the rental price revenue of the property, so projects in the medium-asset operation mode will allocate common areas based on the overall revenue, rather than from the perspective of tenant demand.

The configuration of projects in the light-asset operation mode in the public area depends entirely on the conditions of the area where the project is located itself. The light asset operator can also select projects that meet its conditions for light asset operation from the perspective of its own brand standardized service facilities.

5.3. Operations Management

After the supply of the asset-heavy operation mode project

is listed, the operation and management of the project is a deepening continuation of the positioning of the previous project development, and the operation is done with the capital management mindset, and the whole-cycle operation and management of this guaranteed rental housing project is carried out; relying on the digital management platform, the tenant experience is the core, and a safe, healthy, comfortable and civilized living environment is provided for the tenants; on the basis of the community public support, personalized value-added services are provided, and a service platform based on local life is built to help attract and retain people in the Lin'gang New Area.

The mid-asset operation mode projects provide differentiated services in terms of operation and management according to the characteristics of the housing projects and the living population; through standardized decoration configuration, systematic management process and accurate marketing to improve customer conversion rate, enhance operation and management efficiency, help property owners revitalize their assets and expand the supply channels of government-subsidized rental housing.

Agencies that adopt the asset-light model to operate government-subsidized rental housing emphasize the standardization of operation services, people-oriented, quality assurance, sound service functions, and operation and management to meet the principles of wisdom and convenience, information transparency, security and efficiency to provide service output.

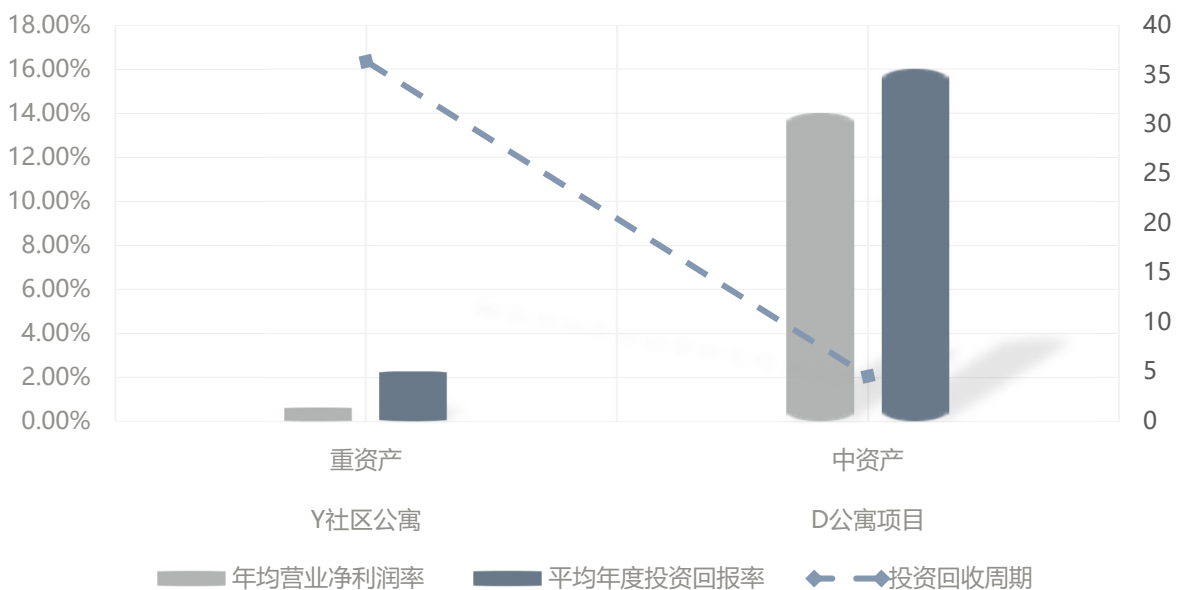


Figure 2. Comparison of cost and revenue of government-subsidized rental housing under different operation modes

年均营业净利润率 Annual average net operating profit margin
 平均年度投资回报率 Annual average returning investment rate
 投资回收周期 Investment Recovery Period

5.4. Operating Costs and Benefits

The comparison of the investment returns of the three operation modes in Figure 2 clearly shows that the asset-heavy operation mode has high investment, long recovery period and low yield, which requires high capital strength and financing ability of enterprises.

The mid-asset operation model can significantly improve the operator's profitability through rental premiums and reduced costs and increases in efficiency when project

conditions are suitable.

In the government-subsidized rental housing project, the asset-light operator is mainly based on the public welfare function of housing guarantee and achieves the purpose of insuring the capital and making a small profit and sustainable operation.

6. Conclusion

By analyzing five dimensions of each representative project under three different operation modes of government-subsidized rental housing operation, such as household design, living population, operation cost and revenue, operation management, and common area configuration, the comparison is made in the form of scores, as shown in Figure 3.

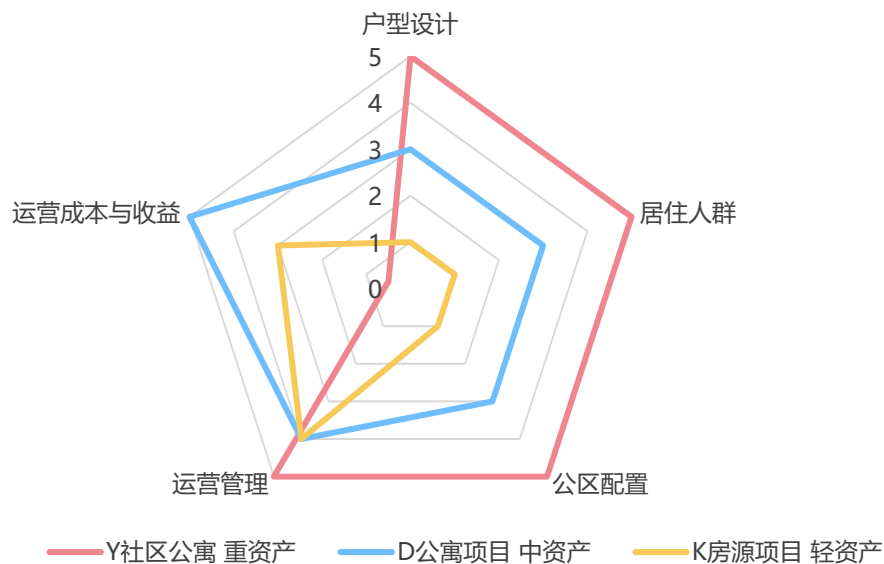


Figure 3. Comprehensive comparison chart of government-subsidized rental housing under different operation modes

户型设计 Household design
 居住人群 Resident group
 公区配置 Configuration of common areas
 运营管理 Operation and Management
 运营成本与收益 Operating Costs and Benefits
 Y 社区公寓 重资产 Y Community Apartments /Heavy Assets

D 公寓项目 重资产 D Apartment Project /Medium Assets
 K 房源项目 轻资产 K Housing Projects /Light Assets

The government-subsidized rental housing projects with asset-heavy operation mode have obvious advantages such as diversity of household design, wide coverage of groups, abundant public area support and perfect operation and management, but the long payback period, low rental return rate and large initial investment capital limit the willingness and investment ability of the government and enterprises to continue investing. In July 2021, the National Development and Reform Commission issued the Notice on Further Improving the Pilot Work of Real Estate Investment Trusts (REITs) in the Infrastructure Sector (Development and Reform Investment [2021] No. 958), which included government-subsidized rental housing in the scope of the pilot

industry, i.e. issuing REITs with government-subsidized rental housing as the underlying assets to increase the proportion of equity financing, reduce corporate indebtedness, and improve the efficiency of capital use and operational efficiency.

Although the government-subsidized rental housing projects in the medium-asset operation mode are limited in all aspects by the conditions of the storage projects themselves, they have obvious advantages in terms of project yields and investment recovery cycles; they can be converted into government-subsidized rental housing projects by converting idle resettlement houses and public housing and seeking cooperation with the government and state-owned enterprises for housing storage; they can create a multi-species supply of youth apartments and blue-collar apartments by jointly developing and operating projects with universities, enterprises and other industries to meet the housing needs of enterprises and individuals.

The government-subsidized rental housing projects operated in the light asset mode are led by service output and set service benchmarks through refined operation and management and all-round innovative measures. It has assumed corporate social responsibility and become a trusted

partner organization of the government.

During the "14th Five-Year Plan" period, the construction of government-subsidized rental housing has become the top priority of national and local governments, and the direction of the development of the housing security system in the Lin'gang New Area is the participation of multiple entities, supply of multiple species, coverage of multiple groups and innovation of multiple initiatives. State-owned enterprises will continue to play the role of demonstration and leadership, "stabilizer" and "ballast" in the development of government-subsidized rental housing. In the selection of the operation modes, a suitable operation mode can be chosen by combining the volume of rental land supply in the area, the space of rental market demand, the development strategy of the enterprise and other factors. As a state-owned enterprise in the Lin'gang New Area, Company A will take the heavy asset operation mode as the leading mode and adopt the medium asset operation mode in phases and enhance its competitiveness through the quality of rental housing,

strengthen the upgrade of operation services and provide a strong guarantee for the introduction of talents and promote industrial development in the new area.

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