Seoul to share with the world!

Seoul Public Housing & Architecture

SEUL METROPOLITAN GOVERNMENT
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We dream of a city where no one has to worry about housing and all can live in a safe and pleasant environment.

The Seoul Metropolitan Government has continued to supply public housing and improve the system of urban infrastructure since 1948, and rebuilt livelihoods in a city severely damaged by war. It achieved a housing distribution rate of 103.8% (3.6 million units) by 2014, with 6.4% (230,000 units) consisting of public rental apartments. Now, the City of Seoul is stepping up its efforts to increase the supply of public rental housing and create a safer, more pleasant living environment.
Housing welfare that allows everyone to peacefully and affordably live in the city
• Greater stability through public housing services
• Stronger housing welfare system to ensure citizens’ rights to residence

Greater supply of affordable public rental housing
• Public rental housing tailored to the needs of the tenants
• Variety in public rental housing, ranging from apartments to detached building units

Creation of sustainable living environments through collective housing management that cares for diverse lifestyles in communities
• Enhancement of people’s capacity to maintain their own dwellings
• Support of a system where diverse parties manage housing units as a unified body

Building a healthy and well-operating architecture culture, collaborating with city residents to strengthen the city’s competitiveness
• Construction of stable buildings that consider environmental and architectural values
• Development of a culture of building that citizens can enjoy and relate to
Rehabilitate safe, happy urban spaces

Safe spaces for daily life, including an urban space dedicated to the wellbeing of citizens, and a rehabilitation of urban sustainability.

Create comfortable, creative architectural and spatial environments

Creative design and urban planning, efforts to improve the architecture service industries, and augmented creation of green architecture and landscaping.

Realize an open and urban culture for citizens

Promotion of a unique historical architecture culture (Hanok etc.), establishment of a harmonious foundation for urban cultures and building in which citizens participate and thrive, and better spatial planning for pedestrians.
01 Overview of Seoul

Area: 605.18 km²
Population (density): 10,386,339 (17,162.3 / km²)

Geographic Expansion:
- 1394 ~ 1913
- 1914 ~ 1963
- 1973
- 2005

Expansion of the Road Network:
- 1936
- 1966
- 1972
- 2000

Expansion of Urban Districts:
- 1957
- 1972
- 1988
- 2005
The provision of housing as compared to the need for housing has improved drastically over the past 20 years. In Seoul, it increased from 69% in 1996 to 103.8%, owing mainly to the supply of high-rise apartment houses. Public and private high-rise apartment houses have been supplied in large quantities since the late 1960s, and the volume of architecture has continued to increase. In 2005, high-rise apartment houses made up more than 50% share of all housing. By 2014 the share had climbed to 59%, making high-rise apartment houses the most typical type of housing in Seoul.

After the achievement of quickly satisfying the quantitative demand for housing, the Seoul Metropolitan Government (SMG) is now refining the focus of its policy to further improve living quality.
40.2% of Seoulites privately own their housing, while 32.1% live in jeonse (deposit-based rental) units and 26.3% in wolse (monthly rental) units.

Jeonse is a rental system unique to Korea, where the tenant puts down a certain amount of money as a deposit for the rental period, which is fully returned upon expiration of the rental agreement. The landlord uses the deposit, usually a large sum of money, to gain interest or make other investments. However, as a low interest rate environment has prevailed in recent years, a dramatically greater number of landlords are shifting away from jeonse and towards wolse. The share of jeonse is gradually decreasing and housing security is weakening, as a greater number of tenants are now burdened with increasing housing costs.

In response to this trend, the SMG is introducing a variety of policies aimed at supplying more public rental housing units, in a bid to safeguard housing for low-to middle-income earners.
02 History of Public Housing & Architecture in Seoul

1950s
A time of rapid change.
1945: Administrative name of Kyongsung-bu was changed to Seoul-si
1949: Seoul-si became Seoul Special City
Urban administrative area expanded.

1960s
A key city in a time of accelerating growth and development.
The economic growth shaped the early stages of a modern city.
Promotion of the 1st and 2nd 5-Year Economic Development Plans (1962 ~ 1971)
Rapid industrialization, urbanization and concentration of population
1963: Urban planning area expanded.

Establishment of related laws
• Dec. 1963: Architecture Expert Act, requiring the issuance of national licenses to architecture experts.

1970s
Transformation into a modern city.
High-rise office buildings started to spring up in the city’s business and commercial centers, as part of redevelopment projects.
Satellite cities appeared, such as Bucheon, Euijeonbu, Sungnam, Anyang, Banwol, Gwangmyeong.
Gangnam and Gangbuk, south and north, respectively, of the Han River, became the largest geographical identifiers for Seoul areas. Sub-centers formed, such as Cheongnyangni, Mialli, Youngdeungpo, Cheonho-dong, and Young-dong. The Gangnam area developed increasingly.
1974: Launch of Subway Line 1, consequently the main mode of public transit shifted from bus to subway.

Establishment of related laws
• Jan. 1973: House Construction Promotion Act (Housing Act), addressing housing shortage.
Building Seoul to become a truly international city.

Construction boom and urban sprawl led to challenges for city planning. Large-scale housing sites began to be developed. The city became more well-known internationally for events, design and global competitiveness.

1986: Asian Games held in Seoul
1988: Summer Olympics held in Seoul

Establishment of related laws

- July 1983: Seoul Metropolitan Area Readjustment Planning Act, organizing the Seoul Metropolitan Area through appropriate dispersal of excessively concentrated population and industrial areas.
- Jan. 1985: Public Rental Housing Construction Promotion Act (Public Rental House Act → Special Act on Private Rental Houses), ensuring housing security for households unable to afford housing prices.

1990s

Seoul Metropolitan Area emerged.

2000s

A time of heightened local autonomy for the city.

Urban policy shifted increasingly from traditional development to integrating sustainability in key planning efforts.

- 2002: The political foundation for an eco-friendly metropolis was established, with the co-hosting of the FIFA World Cup. The Cheongye Stream Restoration Project was implemented.

Establishment of related laws

- July, 2004: Act on Special Measures for Construction of National Rental Houses (Special Act on Public Housing), increasing the supply of public rental houses.
- July 2006: Special Act on the Promotion of Urban Renewal, promoting redevelopment of old city sections. June 2008:

2010s

Becoming a top 5 global metropolis.

Area plans, such as the Downtown Recreation Project, the Hangang Renaissance and Northeastern Area Renaissance, Yongsan International Business Area, Magok Area, and Sangam DMC Development Project are developed. Seoul continues to excel as an attractive global city, which at the same time retains its identity as a historical and cultural city.

Establishment of related laws

- Dec. 2013: Special Act on Promotion and Assistance in Urban Renewal, promoting healthy, sustainable management of urban residential, economic, social, and cultural environments.
- June 2015: Act on Promotion of Building Assets, recognizing buildings such as Hanok, as public goods.
Efforts in Housing Supply

Planning Large-scale Housing Complexes (Establishment of SH Corporation & Housing Case Studies)
**01 Corporate Overview**

**Background of Establishment**
Founded on Feb. 1, 1989 to construct 400,000 housing units in Seoul city under the central government’s “Construction Plan of 2,000,000 Housing Units”.

**Purpose of Establishment**
- Increase supply of high quality residences for citizens
- Provide stable living conditions through urban development land regeneration projects

**Business Scope**
- Acquisition, development and supply of Land
- Construction, supply and management of housing
- Urban regeneration
- Foreign construction projects, etc.

**History**
- **Feb., 1989** Foundation of the Seoul Metropolitan Urban Development Corporation (389 employees)
- **Mar., 2004** Change of Company Name to SH Corporation
- **Nov., 2014** Chang-Heum Byeon takes office as the 13th president

**Capital**

```
Total = Cash + Contribution in Kind

5.2 trillion Won (4.4 billion USD) = 3.5 trillion Won (2.9 billion USD) + 1.7 trillion Won (1.5 billion USD)
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**Employees**
711 people

**2015 Annual Budget**
4.5 trillion Won (3.8 billion USD)

```
2011 2012 2013 2014 2015

6.2 trillion Won (5.2 billion USD) 5.3 trillion Won (4.5 billion USD) 5.6 trillion Won (4.7 billion USD) 9.3 trillion Won (7.8 billion USD) 4.5 trillion Won (3.8 billion USD)
```
02 Main Businesses

Land Development

- Total area of 17,810,000㎡ in 40 districts
- Developed Suseo, Daechi, Gayang, Bangwha, Jangji, Sangam, Balsan, Eunpyeong

Housing Construction and Supply

- Constructed 197,526 housing units: for sale 89,207 units / for rent 108,824 units
- Provided tailored houses for diverse social status and generations: public dorms, safe housing for women, co-op housing, officiates for young entrepreneurs, medical supportive housing, long-term rental housing, etc.

Participate in 4 projects

Public Sector

- Permanent Rental
- 50-Year Rental
- National Rental (30-Year Rental)
- 5-Year Rental
- 10-Year Rental
- Rental Housing Paid by Installments
- Long-term Rental Housing with deposit money

Private Sector

- Multi-Household-Dwelling Houses
- Long-Term Deposit Money Support
- Deposit Money Support for Tenants
- Reconstructed Housing
- “HIMANG” (Hope) Housing

Build-to-rent

- For basic national welfare beneficiaries
- For lower income groups
- For lower and middle income groups
- Switching to own house after 5-year rent
- Switching to own house after 10-year rent
- Rent for 20 years

Private Sector

- Rent after buying multi-household-dwelling houses
- Deposit money lending(supported by SMG)
- Deposit money lending(supported by MLTI)
- Rent after buying reconstructed houses
- Dormitory for university students
Housing Management and Housing Welfare

• Manage 171,503 rental housing units over 407 complexes and operate 11 housing welfare centers
• Build a platform for Seoul citizens’ housing welfare through housing welfare centers → Operate employment, counseling and rehabilitation programs

Urban Regeneration

• Participating in 4 projects
• Enhance quality of life and improve urban environment by pre-planned urban maintenance

Energy Supply & Renewable Energy

• Operate two cogeneration plants in Mokdong and Nowon
  : Supply heating to 251,537 housing units and 265 buildings
• Build “Energy zero house” to cope with global climate change
  : Fossil fuel(petroleum, coal) → Alternative fuel(solar energy, terrestrial heat, etc.)
  : Install 20,000 solar energy facilities in housing complexes until 2018

Overseas Business

• Hong River Development Project in Vietnam(2008)
• Public Housing and Urban Regeneration Projects Cooperation with Taipei City(2015)
03 Three Best Projects

- **Magok District**
  - R&D Complex Development

- **Eunpyeong New Town**
  - Urban Redevelopment

- **Sangam DMC**
  - IT Media Complex Development
Magok, the center of the southeastern region of Seoul, is aiming to create greater future values as future-oriented, self-contained complex that reflects the paradigm of the new era.

**Magok Smart City**

**Gateway Town to Northeast Asia**
- **Business Hub** Base of a new economy where both large and small businesses thrive in a win-win situation
- **Gateway town** Center of international exchanges in Northeast Asia
- **Specialized Town** Specialized downtown fostered with professionalism and creativity

**Innovative base of knowledge industries**
- **Creative Core** Commercialization is possible at every step from the development of technology to manufacturing and consumption
- **Leading Frontier** Leading pioneer of the convergence industry, guiding the future economy of Seoul
- **New-Industry Incubator** Eco-system of knowledge industries, serving as a base for the foundation and growth of enterprises

**Green town of the future**
- **Pedestrian & Bicycle Friendly Town** Well-established infrastructure for pedestrian and bicycling
- **Botanic Gardens** A garden town that strikes a harmonious balance between technology and sensibility, production and life, and nature and industry
- **Living Laboratory** A green benchmark town built with eco-friendly, new & renewable energy tech
Overview

• Location: Magok-dong & Gayang-dong, Gangseo-gu, Seoul
• Area: 3,665,722㎡
• Developer: SH Corporation.
• Infrastructure construction: Dec 2007 – Dec 2016

Overview of Each Site

<table>
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<tr>
<th>Classification</th>
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<tr>
<td>Total</td>
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<tr>
<td>For support facilities</td>
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<tr>
<td>Business &amp; commercial area</td>
<td>388,660</td>
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<td>Residential area</td>
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<tr>
<td>Infrastructural facilities</td>
<td>1,870,611</td>
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</table>
Area Designated: 595,340㎡
• 16 complexes with 12,015 households

Developmental Direction
• Improving the design of apartment buildings to make them harmonize with the surroundings
• Designing energy-efficient housing and expanding community facilities
• Fostering a large residential area that blends well with other adjacent apartment complexes

Area Designated: 388,660㎡

Developmental Direction
• Taking the lead in the Northeast Asian economy
• Establishing a high-tech business hub in connection with advanced industrial clusters
• Growing as a commercial hub based on convenient transportation

Area Designated: 1,110,805㎡
• For industrial facilities: 729,785㎡
• Site area for applied facility: 81,326㎡

Developmental Direction
• Introducing futuristic research centers based on the conversion of high-end technologies (IT, BT, GT, NT)
• Fostering an industrial ecosystem where large and small enterprises coexist
• Building global R&D clusters

Safe City
• Smart CCTVs are installed in the schools, parks and streets of residential areas. Police at the control tower will be immediately informed of emergencies to ensure a prompt response.
• The water levels of storm drains and sewers are monitored in real time for the purpose of detecting and handling regional torrential rains promptly. Main roads are observed by an image surveillance system in order to prepare for disasters.

Convenient City
• Smooth traffic flow and real-time traffic information are provided to citizens.
• Road traffic information including detours, bottlenecks, accident spots, intersections and areas of congestion will be collected and edited in real time, and provided in connection with the Seoul Transportation Operation and Information Service.
• Illegal parking will be monitored and controlled in main commercial areas, congested roads and alleys.

Information City
• The high-speed broadband ICT infrastructure is built by laying communication cable ducts and optical fiber cables throughout the whole of Magok Smart City and connecting installed facilities with an integrated control center.
• CCTV, water level measurement devices, and sensors of facilities are installed for communication with the control center.
• Free wifi service is available within 50-100 meters radius of parks, subway stations, bus or taxi stops.
05 Urban Redevelopment – Eunpyeong New Town

Before Development

After Development

Project Overview

• Location and Area: Eunpyeong-gu/ 3,492,421 m²
• Developer: SH Corporation
• Development Period: 2002 – 2016
• Project Cost: 4.7 trillion won (3.9 billion USD)
• Housing construction: Total 17,464 units (Sale: 10,550/ Rent: 6,914)

Project History

• 10. 2002 Announcement as a New Town Development Model Area
• 02. 2004 Eunpyeong Development Plan Official Notification
• 08. 2005 Apartment Construction Start
• 11. 2007 Apartment Sale
Main Development Features

- Building rural-eco city as inner-city resort by using surrounding natural conditions
- Creation of different types of housing: Courtyard type, roadside type, tower type, terrace type, etc.

Resort-Type Housing Development

- Area: 36,150㎡ (95 lots)
- Urban Korean traditional housing model presentation

Korean Traditional Housing Construction

- If garbages are put into a drop hole, they move through transport pipelines and into incinerator automatically

Incineration Plant

- Creation of CCTV, wireless & wired networks and integrated control center
- Operation of security CCTV systems, U-Home Information provision service, illegal parking crackdown service, digital library system

Smart City
06 IT Media Complex Development : Sangam DMC (Digital Media City)

Project Overview

- Location and Area: Mapo-gu/ 1,697,888㎡
- Developer: Seoul City, SH Corporation
- Development Period: 1998 ~ 2014
- Project Cost: 0.4 trillion Won (0.3 billion USD)
- Housing construction: 5,271 units (Sale: 3,611 / Rent: 1,660)

Project History

- 06. 1998 Development Plan Official Notification
- 11. 2000 Apartment Construction Start
- 02. 2001 Digital Media City Masterplan Established
- 05. 2003 Apartment and Lot Sale
- 11. 2014 Completion of Construction
Main Development Features

DMC Media Industry Complex
- Area: 337,000 m²
- Promoting IT industry, digital media and entertainment industry
- Tenants: MBC, CJ E&M, YTN, Samsung SDS, LG CNS, National IT Industry Promotion Agency, etc.

World Cup Park
- Area: 3,471,090 m²
- 5 theme parks: Peace park, Sky park, Sunset park, Nanjicheon park, Nanji Hangang park
- Over 9.8 million visitors in a year

Rental Housing for foreigners (DMC Ville)
- Area: 9,313 m²
- Capacity: total 175 units, 30,535 m² floor area
- Available to foreign residents in Seoul

DMC R&D Center
- Area: 3,367 m²
- Capacity: over 50 tenants, 29,760 m² floor area
- Provide office space for foreign businesses with R&D projects

High-Tech Industry Center
- Area: 17,070 m²
- Capacity: over 225 tenants, 77,191 m² floor area
- Provide tenants with spaces for manufacturing facilities
Development of a Sustainable City

Keeping Cities Vibrant and Healthy through Urban Regeneration
Urban Regeneration – Seoul Station Overpass

Regenerating an old, deteriorating overpass into a pedestrian-oriented space.

• Designer: Winy Maas (the Netherlands)

The Seoul Station Overpass will evolve into a walking tour network of ‘17 Paths for People.’ These 17 Paths for People, whose layout will resemble spreading tree branches, will attract people to walk therein, with each and every step helping to revive and rejuvenate the surrounding areas.

7017 Project

Co-existence of the past and the future
Not just preserve Seoul’s history and heritage but revitalize the extensive Seoul Station area through the urban renewal project

Urban Regeneration

People-centered

Walkable City
Make Seoul more Pedestrian-friendly. Provide an area for rest and relaxation in a concrete jungle

Economic Boost

Unleashed vitality
Link either side of Seoul Station disconnected by the railroad and spread urban vitality to western part of Seoul
Built in 1970, the Seoul Station Overpass will be reborn in 2017 with 17 pedestrian pathways decorated with 645 round flowerpots and interspersed with 18 convenience facilities and areas for people to relax.

**Toward jungnim-dong**
Install a branch-shaped passage linking the walkways and jungnim-dong

**Malli-dong Park**
Turn former parking lot for garbage trucks into an area for rest and relaxation

**Rose Garden**
Plant many varieties of continuous bloom roses and use the square as an event hall or a rest place

**Elevator at Seoul Station Square**
Install an elevator next to the Seoul Station police box providing assess to the walkways

**Toward Cheongpa-dong**
Install stairs leading to Cheongpa-dong and crosswalks linking Seoul Station’s western entrance and Malli-dong Park
Install an escalator and an elevator on the road to Toegye-ro, linking the underground, the road and the overpass.

Provide direct access to and from the overpass and Hoehyeon Subway Station with an elevator.

Connect the overpass and surrounding buildings to enhance accessibility.

Installing an observatory at a magnificent viewpoint.

Preserve the old overpass rail designated as cultural assets.

Spread urban vitality to neighboring areas from Seoul Station which is frequented by 390,000 citizens every day.

Install an elevator leading to Namsan Flyover connecting the overpass to Hanyangdoseong and Namsan.

Connect the overpass and surrounding buildings to enhance accessibility.
Diversification of Rental Housing Supply

Additional rental housing is made available according to the needs of different tenant types rather than simply focusing on rental housing for low-income earners.
**Background**

**Growing number of micro-families:** sharply increased inflow of young people and growing cost of housing for newlyweds

In the past 10 years, Seoul has seen a rapid increase in the number of young students and job-seekers in their 20s. Meanwhile, married couples in their 30s have left Seoul in greater numbers than those in other categories, as it is difficult for them to find housing suitable for their stage of life. Many of those in their 40s and 50s and looking for larger living spaces as their children grow, have also given up on living in Seoul and have moved to the satellite cities, due to the high cost of housing within the capital.

**Few young people able to move into public rental housing**

Share of households in public housing by age:
- 20s & 30s (12.7%), 40s & 50s (39.4%), 60s & above (47.9%)

Limited supply of large-scale public rental units through housing site development

Public rental units have become less available through large-scale development as housing sites became scarce.

Supplied more ‘Seoul-style Social Houses’ as demand diversified and the government could not continue increasing the supply.
01 Seoul—style Social House (=Community House)

Housing with a community area, which encourages meaningful community through common dwellings, resolves various problems in daily life, and secures housing at an accessible price.
ⓐ **Cooperative public rental**
Tenants form a cooperative by contributing equity therein, and the cooperative independently plans, builds and manages the cooperative public rental housing. (In other occasions, tenants of public rental housing do not make equity contributions - qualifying applicants become members of a cooperative that maintains the housing.)

ⓑ **Multi-unit housing & multi-household units**
Under this program, the SMG buys (through SH Corporation) existing housing and supplies it according to consumer characteristics. Borough offices secure and supply housing according to local characteristics and housing demand, such as the existence of many newlyweds, families with infants, working youth, senior citizens living alone, business start-ups, etc.

- **Houses for the vulnerable**
  To raise the residential settlement rate houses with community space and welfare support facilities are provided to socio-economically vulnerable groups who live in non-residential buildings, such as jokbang or gosiwon over a long period.
- **Hope House for university students**
  To resolve housing problems faced by university students, community housing with common living spaces are supplied.

ⓒ **One-room units**
A program designed to supply public studio apartments, convenient and safe, to small households of 2 or 3, university students, and those living in unconventional residential environments.

ⓓ **Collective housing**
The SMG supplies consumer-oriented public rental housing for newlyweds, university students and new graduates at affordable rental rates.

ⓔ **Private businesses (on leased public land)**
If a private developer submits a rental housing project plan which aims at developing on land owned by SMG or SH Corporation and is able to guarantee that the plan will benefit the public and be in harmony with the characteristics of the hosting community, a review will be given. If the plan is accepted, the public land will be leased for a low price to that private developer to supply housing to the community.

ⓕ **Seoul REITs (on leased public land)**
REITs (Real Estate Investment Trusts) have been introduced to tap into private financial resources, as a part of the plan to increase the supply of community housing. SH Corporation plays a leading role in establishing and managing REITs that provide rental housing, to ensure development projects focus on benefiting the public.
SH Corporation receives investment from the private sector to build rental housing, and pays investors dividends from the profits generated through asset management. The public sector ensures that rental housing will continue to benefit the public by leasing out the public land over the long term, or taking responsibility for follow-up management.

**Social economy (on leased public land)**
Cooperation between the public and private sectors helps to address the housing needs of youth and low-income earners.

Similar to Type E in that social housing which guarantees affordable rent and stable rental periods is provided to the younger generations and low-to middle-income earning households. However, Type G housing is developed by an entity related to the social economy, rather than simply in the private sector.

**Support for remodeling of semi-housing (Gosiwon, etc.)**
With this program, the SMG is providing stable housing conditions by purchasing or leasing old or vacant non-residential facilities (such as gosiwon and motels, often used for residential purposes by vulnerable parts of the population), remodeling such facilities, and renting them as public rental houses for accessible prices and periods.

**Community housing linked to rehabilitation projects**
Under this program, community housing in areas designated for urban rehabilitation is provided to encourage artists, creative workers, and the youth to move in.
02 More Alternative Rental Housing Options

Remodeling of vacant units

The SMG subsidizes remodeling (50%, up to KRW 40 million) of detached, multi-household units or multi-unit housing with 3 or more rooms into housing with improved living conditions, and rents them out at 80% or less of market rates for a minimum 6 years.

Many generations under one roof

This co-habitation program connects the elderly (who have vacant rooms in their houses) with college or graduate school students in need of rooms. The elderly offer their unused rooms at lower prices and the students pay a low rent and provide help with daily work or care services. The cost of rental under this program is no greater than KRW 200,000 per month – the SMG provides a subsidy for improvement of living conditions (up to KRW 500,000), and the rental is for 1 year.
Modular housing

With this new house-building method all or some major structural parts of a house (basic frame, electrical wiring, floor-heating, etc.), are pre-fabricated and assembled on site.

Advantages

• Shorter construction periods than for concrete buildings (about 50% less on average), at lower construction cost through mass-production
• Houses can be recycled and produces only 1/3 the waste of concrete buildings when torn down
• Modular houses can be built in uniform quality, with less need for highly-skilled construction workers

Construction Process

• Simultaneous commencement of site preparation and module production – This fast-track process shortens the construction period.
• Construction of Cheongdam Muto was completed in 45 days (including 3 days for module assembly).
03 Improving Living Conditions for Low-income Earners

Home Improvement of Hope

A project that improves living conditions (replacing wallpaper and flooring, etc.) for low-income earners who are unable to find alternative residence due to financial difficulties. Savings can be realized on living costs as better insulation, such as from new doors and windows, improves energy efficiency.

- **Beneficiaries**
  Households that earn 60% or less than the median income (and no more than 150% of minimum cost of living).

**Elements subject to improvement (13 items):**
Wallpaper, flooring, insulation, doors, waterproofing, eaves, window frames, kitchen sinks, sinks and toilets), ceiling, (bathroom and kitchen) tiles, painting and electrical work.

Jjokbang Remodeling

Jjokbang means an affordable housing below minimum standards for the poor. It is cheaper than other affordable housings because there is no bathroom, kitchen and toilet.

Jjokbang remodeling is a program designed to provide minimum residential conditions for jjokbang residents, most of whom are socially neglected people. Most jjokbang are old, structurally unsafe and offer almost no personal security. Since most of them are also unlicensed and unregistered, it is extremely difficult for an administrative institution to intervene. Though they are sub-standard housing, jjokbang serve as a form of housing that the socially neglected can afford. Thus, the SMG decided to improve their spatial environment, to provide safer conditions for occupants.
Jjokbang Remodeling at Yeongdeungpo-gu

**Project implementation**
- A private building improvement project under business agreements between private and public parties.
- Parties: SMG, Yeongdeungpo-gu Office, Gwangya Church and building owners
- Craftsmen from a variety of disciplines voluntarily donate their time and skill and social enterprises participate to create jobs for the socially neglected.

**Project sites**
- Address: 422-63 Yeongdeungpo-dong, Yeongdeungpo-gu and surrounding area
- Number of targeted jjokbang units: 441

**Temporary accommodation for jjokbang residents**
- Address: 411-28 Yeongdeungpo-dong, Yeongdeungpo-gu
- Building: 3-storey buildings with total floor area of 535.35㎡ (30 bedrooms, community center, etc.)

**Project phases**

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<td>95 units</td>
<td>130 units</td>
<td>114 units</td>
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**Formation and operation of project implementation group**
- Goal: Build a system of public-private cooperation for successful project implementation.
- Participants: SMG, Yeongdeungpo-gu Office, Gwangya Church, public and private construction designers, SH Corporation, and various social enterprises.
- Organization: 3 departments under a project head, with an appointed private expert.
- Operation: The group meets weekly to discuss the progress of the project.

The SMG received the Sir Robert Matthew Prize from Union Internationale des Architects (UIA) in 2014, for its improvement of residential environments through the Yeongdeungpo Jjokbang Remodeling Project.
Expansion of Residential Support System

The SMG operates an organization dedicated to improve residential spaces and provide a variety of services to create safe, pleasant living environments.

This organization serves to support a large number of social housing units. The Center aims at supplying community housing tailored to housing demand.

**Main roles**

- Examining residential conditions of low income earners
- Identifying and managing resources, such as a housing and site inventory, to improve residents’ socio-economic conditions in the long term
- Identifying actors and entrepreneurs in the social economy related to housing and support services.
- Creating and implementing plans to support the social economy players related to housing, and evaluating outcomes of these plans.
- Creating networks between these social economy players and low income residents
**Residential Welfare Support Centers**

This organization is dedicated to providing information on residential welfare projects to vulnerable groups of residents. It also manages case examples, organized under the Basic Ordinance on Residential Welfare from the SMG. Currently, there are 8 Centers in Seoul, with 2 more expected by 2016.

**Main activities**
- Providing information and managing residential improvement
- Helping protect residents’ rights in residential improvement projects
  - Providing various services related to delivery of residential improvements
- Offering residential improvement training to residents
- Developing and implementing sustainable projects

**Jeonse and Wolse Deposit Support Center**

The Center aims at better protecting the rights of tenants by resolving conflicts with landlords, such as providing information on housing rent issues and loans, arbitration, legal remedies, etc.

- The Center provides consultation on: general issues related to the Housing Lease Protection Act, opposing rights & rights to preferential payment, rental agreements and renewal, property maintenance, rental adjustments, etc.
- The Center provides temporary arbitration for disputes between tenants and landlords related to housing repair. The Center’s dedicated lawyers and arbitrators quickly resolve problems related to mildew caused by water leakage and frozen and ruptured pipes from old boilers.
- For the first time in Korea, SMG is offering two types of loans designed to assist tenants when they must move out: Loan type 1 is of an amount equivalent to the deposit tenants paid to their existing landlords, allowing tenants to move into their new place even if their existing landlords fail to return their deposit upon lease expiry, leaving the tenants without enough money to pay the deposit required for their new rental housing; and Loan Type 2, which works as a bridge between the dates of moving out and moving in, which is drawn before the existing lease period expires from a fund established by SMG.
Efforts to Manage Individual Buildings

Enhancing an urban culture that ranges from improvement of residential environments to proactive management of spatial planning.
Background

The SMG seeks to improve the architecture culture that has, up to now, been solely based on meeting the demands of rapid economic growth. As more and more citizens began to demand buildings that benefit the public and contribute to sustainable living and cultural spaces, the SMG introduced the Master Architect and Public Architect systems to turn public buildings into integrated urban spaces.

City Architect of Seoul

City Architect of Seoul system was introduced in 2014 to improve public architecture and urban environments in Seoul and to create a more citizen-oriented urban planning.

The roles of a City Architect include:

- Advising on policies related to architecture and urban design
- Advising on plans and basic designs for buildings, spatial environment projects, urban development projects, etc., commissioned and developed by the Mayor
- Advising on plans and basic designs for projects on development of urban planning facilities or sites for public facility relocation
- Providing expert advice on designation of architecture design model projects and their execution
- Exchanging information with public architecture experts and building cooperative systems with such experts
- Other issues as requested or deemed necessary by the Mayor
The SMG has introduced the Seoul Architects system to strengthen the city’s competitiveness by making sure its architecture and spatial environments benefit the public and to identify and develop architects that are young, new and have original ideas. The Seoul Architects system was adopted as the perception of buildings has shifted from being seen as private property and products of technology to a modern image of public utilities and cultural products. Both rising architects aged 45 or younger and MPs, who establish master plans for improvement projects, are referred to as Seoul Architects.

**Role**

- The roles of a Seoul Architects are: designing buildings for public institutions, giving expert advice related to design, and working as an intermediary in the design process.
- Participating in designated open-design competitions for small-scale public architecture projects (valued at KRW 100 million or less).
- Suggesting guidelines and providing advice on improvement plans (redevelopment, reconstruction or new town).

Some major events related to the Public Architect system include:

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Plans for implementation of the Seoul Public Architect system announced by the SMG.</td>
<td>74 Seoul Public Architects appointed.</td>
<td>26 additional Seoul Public Architects appointed.</td>
<td>104 Seoul Public Architects appointed for the 2nd phase.</td>
</tr>
</tbody>
</table>

The Hole at University of Seoul
Dodam Nursery
Majang-dong Community Service Center
Climate change has significant impacts on the urban environment. As international climate change treaties are ratified and executed, Korea has declared that it will reduce its Business-As-Usual activities by 37% by 2030. The SMG is cooperating with the nation’s efforts to actively respond to climate change, through capacity building and implementing actions in the area of construction.\(^1\)

When looking at the status of construction in Seoul, 60.4% of the city comprises built-up areas, making Seoul the dense city in the nation. Of the total 630,000 buildings in the city, 49.5% require remodeling.

### Green Building

The SMG

- aims at gradually strengthening design standards for new buildings, in support of zero-energy Building\(^2\)
- actively promotes management of green building performance and raising efficiency of existing buildings at low cost\(^3\)
- plans to build a public-private model of green building promotion using excellent private infrastructure.

---

1. **Business-As-Usual**: Estimation of greenhouse gas emissions scenario without reduction targets.
2. **Zero-energy Building**: The practice of constructing buildings that use a minimum amount of energy, by maximizing insulation performance, reducing energy consumption and generating energy with new and renewable energy sources.
3. **“Green building”**: A building that 1) is highly energy-efficient, 2) uses more new and renewable energy than conventional buildings 3) emits minimum amounts of greenhouse gases (1) through 3) as stipulated in Article 54 of the Framework Act on Low Carbon, Green Growth) and 4) makes a minimum impact on the natural environment while providing a pleasant, healthy residential environment.
For the Vitalization of Green Buildings
Promotion of Seoul Green Building

Green Building VISION

VISION

Prioritizing citizens’ health and the environment

GOAL

Goal 1

Goal 2

2023 2020

26.9%

(-26.9%)

(10.1 Million tons)

Making the vision a reality

STRATEGY

Strategy 1

Strategy 2

Strategy 3

Creating a Healthy Seoul,
For Citizens Through Seoul’s Green Buildings

For the Vitalization of Green Buildings
Promotion of Seoul Green Building

Pioneers in the Green Building Sector
Seoul’s Landmark Green Buildings

Promotional Facility
Seoul Energy Dream Center

- Location: Mapo-gu, Sangam-dong
- Gross Area: 3,762㎡
- 3 Floors/1 Basement Floor
- Certification Date: 2012
- Rating: Green Level 2
- Primary Energy Consumption: 53.5 kwh/㎡y

Office Facility
FKI Tower Center

- Location: Yeongdeungpo-gu, Yeoido-dong
- Gross Area: 168,681㎡
- 50 Floors/6 Basement Floors
- Certification Date: 2013
- Rating: Green Level 1
- Primary Energy Consumption: 262.2 kwh/㎡y

Living Facility
Cheongdam-dong Raemian Apts

- Location: Gangnam-gu, Cheongdam-dong
- Gross Area: 36,357㎡
- 16 Floors
- Green Remodeling Demonstrative Case Study of Korea Institute of Civil Engineering and Building Technology’s ‘Zero Energy Building Total Exterior System Development (2011)’

Efforts to Manage Individual Buildings
Building a Sustainable Green City for Climate Action Green Building Roadmap of Seoul

40% Greenhouse Gas Reduction Target by 2030!

Building Design Guideline

Green Building Roadmap of Seoul

"Green Design Seoul” Green Energy Building Guidelines

2007

Revision

Energy Consumption Credit (Building Energy Standards for Seoul, BESS)

2011

Revision

Seoul Green Building Guidelines

2013

One Less Nuclear Powerplant Part 1

2012

+ 2.1 million TOE Energy reduced

(Thereof 0.68 million TOE from the building sector)

One Less Nuclear Powerplant Part 2

2014

+ Reduction target 4 million TOE in the building sector

Reinforce Seoul Green Building Guidelines

2016

GHG Emissions Reduction by 26.9% (Compared to BAU)

2020

+ Expand preliminary energy assessment

+ Expand roadmap of renewable energy construction for new buildings

Towards Zero Energy Building (ZEB)

2023

Seoul’s GHG Emission Reduction Target 40% (compared to total emission amount)

2030

+ Korea’s GHG Emission Reduction Target 37% (Compared to BAU)

What is G-SEED?

A government led certification system introduced in 2002 that was created to accomplish sustainable development and encourage resource conservation and environment-friendly buildings. Ratings range from Green Level 1 to 4, from highest to lowest.

Sales Facility
Lotte World Mall

- Location: Songpa-gu Shincheon-dong
- Gross Area: 465,609㎡
- Floors: 11 Floors/2 Basement Floors
- Certification Date: 2014
- Rating: Green Level 1

Accomodation Facility
May Place Hotel

- Location: Jongno-gu, Wonnam-dong
- Gross Area: 6,942㎡
- Floors: 13 Floors/2 Basement Floors
- Certification Date: 2013
- Rating: Green Level 1

Office Facility
City Hall Seoul Metropolitan Government

- Location: Jung-gu Sejong-daero
- Gross Area: 90,056㎡
- Floors: 13Floor/5Basement Floors
- Certification Date: 2013
- Rating: Green Level 1
Background

The SMG preserves architecture and uses its urban assets to strengthen the ‘Seoul-ness’ of the city, where the past and present co-exist. Starting with a policy designed to preserve hanok in Bukcheon in 2002 and under the Hanok Declaration of 2009, the SMG has been maintaining, protecting, and improving existing hanok, and engaging in construction of new ones.

The Value of Hanok in Seoul

An urban landscape that represents Seoul, a city of history

Healthy living spaces

Lifestyle and heritage within the city
The SMG provides subsidies for repair, improvement and new construction of hanok through its Hanok Registration Program and also seeks to preserve and promote them through street improvements [moving power lines underground and paving sidewalks] and implementing projects to acquire and make good use of hanok.

### Total Amount

<table>
<thead>
<tr>
<th>Registered Hanok (units)</th>
<th>Support Hanok (units)</th>
<th>Supporting Fund (million)</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Subsidy</td>
<td>Loan</td>
</tr>
<tr>
<td>585</td>
<td>398</td>
<td>15,479</td>
<td>6,395</td>
</tr>
</tbody>
</table>

### Subsidy & Loan

<table>
<thead>
<tr>
<th>Category</th>
<th>Supporting Fund (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subsidy</td>
</tr>
<tr>
<td>Renovation</td>
<td>6,000</td>
</tr>
<tr>
<td>Renovation</td>
<td>8,000</td>
</tr>
</tbody>
</table>
Public Architecture Festivals

Promoting traditional and modern Korean architecture to the world through a series of cultural festivals
01 Seoul Architecture Culture Festival

The SMG began presenting the Seoul Metropolitan Government Architecture Award in 1979, an award that was renamed the Architecture Culture Festival Award in 2009. The Architecture Culture Festival is an annual event hosted by the SMG, with major topics of the year as the theme, to promote a better culture of architecture by raising awareness of the value of physical environments and their effect on people’s lives. The Festival was also designed by SMG to encourage citizens to participate on a personal level, to increase public interest in architecture and to realize the value of open and participatory methods. In 2015, the Festival was held in several areas of the city, including City Hall, Seoul Plaza, and the former National Tax Service Namdaemun Annex, for one month (October 8th to November 8th), under the theme of Urban Rehabilitation. Approximately 30,000 persons participated in the variety of programs, from exhibits to personal participation programs, etc.

02 The Seoul Biennale of Architecture and Urbanism

The Seoul Biennale of Architecture and Urbanism is a new major initiative of the Seoul Metropolitan Government. The inaugural Seoul Biennale in 2017 deals with the emerging urban commons. The economic, political, and technological mechanisms of modern urbanism based on the classification and separation of human activities into work, dwelling, recreation, and transportation, are in a state of crisis. As an alternative to the modern city, the Seoul Biennale proposes ten commons—four resources of air, water, energy, and earth, and six commonalities of connecting, making, moving, sensing, sharing, and recycling—as the foundation of a new urban cosmopolitics. The Seoul Biennale 2017 is organized along two primary sections: Thematic and Cities Exhibitions and Seoul Lab. The Exhibitions showcase the most innovative initiatives occurring in cities around the world. The Seoul Lab uses Seoul as a laboratory of the commons. It comprises of Live Projects Seoul, Mapping the Commons, International Design Studio, Film and Video Program, Public Programs, and Information Platform. The results and activities of Seoul Lab will be coordinated with the Thematic and Cities Exhibitions. The Seoul Biennale 2017 will be held from September 1 to November 5, 2017 at Donuimun Museum Village, Dongdaemun Design Plaza, and various locations in Seoul.
UIA 2017 Seoul World Architects Congress

The SMG is proud to host the UIA 2017 Seoul World Architect Congress. UIA (Union Internationale des Architects) is an international non-governmental organization which is recognized by the United Nations as the only association in its field. It arranges international exchanges and cooperation in the areas of architecture, residential environments, urban infrastructure and preservation of urban environmental heritage. Currently, UIA has approximately 1.3 million architect members from 124 countries. For professionals working in architecture, construction, and building design, the Congress is the equivalent to the Olympics and is held every three years. Different regions in the world take turns as hosts, with each host country selecting its own special theme. International conferences, academic programs and exhibitions, and programs involving student and citizen participation are offered as part of the Congress. The SMG has entered a bid to be the host country three times, and was announced as the host during the Tokyo Congress in 2011. The formal appointment as host was announced during the Durban Congress in 2014.

The theme of the Seoul Congress in 2017 is "Soul of City." UIA commented that "Seoul has a perfect blend of traditional and modern senses, and the theme of the 2017 Congress reflects such characteristics. While Seoul has achieved a fine balance between natural scenery and advanced technology, it must discover a more innovative meaning for the existing environment, for itself and other cities in the world."

Thus, the SMG is seeking to present the city’s strength, for example as a smart city connected through the Internet of Things, together with a variety of exhibitions, academic programs and building tours.

- **Hosts**: UIA, Federation of Institutes of Korean Architects (FIKA), and the SMG
- **Date & Venue**: Sept. 3 – 10, 2017 (8 days) at COEX, Dongdaemun Design Plaza and other venues
- **Participants**: Approximately 30,000 from over 120 countries, including representatives from UN-Habitat, UNESCO and other organizations.
- **Theme**: Soul of City
  - Sub-themes: cultural heritage, sustainability and technology
Seoul, ready to share with the world!

Seoul Public Housing & Architecture

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