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O1 OVERVIEW

K-Smart City: Connecting Korea's Future through Innovation

Korea's smart city initiative leverages advanced digital technologies and innovative urban designs to address urban challenges and promote sustainable growth.

As a global leader in smart city development, Korea showcases future-ready urban models through diverse smart technologies and an international network of collaboration.

Vision and Goals of K-Smart City

K-Smart City aims to seamlessly connect people and places, fostering coexistence and growth. Through cutting-edge digital environments, K-Smart City enables citizens to access urban services conveniently, while creating vibrant, innovative ecosystem led by private enterprises and supported by public initiatives. This approach positions Korea as a global leader for future smart cities.



to Promote Sustainable Growth Goals 赤 **Cutting-edge Digital Space Innovation Space Smart Space** Where everyone can Led by the private and that serves as a model access smart services supported by the public for the world anytime, everywhere **Strategies Urban Infrastructure** Sustainable & Private Sector-friendly International based on Al and Data **Industrial Ecosystem Inclusive Cities** Cooperation Action Platform City **Environment for** Revitalzation of Strengthening implementation promotion specialized international of Data Hubs Urban Tech-based cooperation Complexes network Al-based Global Responding Strengthening to the climate crisis Data Hub governance expansion of and enhancing advancement and regulatory K-Smart Cities digital inclusion innovation Provision Smart cities Private sector-led of smart solutions based on Digital industrial for each region Twin technology ecosystem Completion Support of the national pilot for smart citycity projects related industries

02

Smart Cities that Connect People and Places

01

Vision

02 SMART CITY STRATEGY

K-Smart City is advancing through four strategic pillars

K-Smart City stands out through its citizen-centered solutions, national-level data hubs, and digital twin technology, cementing its role as a leader in the global smart city landscape.



Expanding Sustainable Urban Models



Cultivating a Business-friendly Innovation Ecosystem



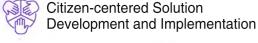
Building AI and Data-driven Infrastructure



Driving global
Expansion of
K-Smart City Solutions



Differentiation





National-level Data Hubs and Digital Twin Platforms



03 KEY INITIATIVES

K-Smart City implements innovative smart city models through the following initiatives, demonstrating significant success with pilot projects and practical applications.

Expanding Sustainable Urban Models



Implementing and Scaling Platform Cities Open-source solutions integrated with Data Hubs



Addressing Climate Change and Enhancing Digital Inclusivity Carbon-neutral cities and inclusive digital services.

Building Al and Data-Driven Infrastructure



Activating Data Hubs with Al-Powered Analytics Standardized urban data linked with centralized hubs.



Digital Twin-Enabled
Smart City Planning
Simulations enhancing urban
solutions and operational reliability.

Fostering a Business-Friendly Innovation Ecosystem



Creating Urban Tech Innovation Zones

Testbeds for emerging technologies and data-driven solutions.



Enhancing Governance and Regulatory Flexibility

Adaptive policies and regulatory sandbox environments.

Driving Global Expansion of K-Smart City Solutions



Strengthening Global
Partnerships
Collaborations with leading countries
and international organizations.



Localized Solutions for Global Markets Customizing K-Smart City solutions for international cities.

04 NATIONAL **SMART CITY PROJECTS**

Sejong Smart City Project

The National Pilot Smart City to be built in the Sejong 5-1 district will transform urban living with technological innovations in seven areas, including transportation, health care, education and energy.



7 Innovation Factors



Transportation

Shared Mobility (Shuttle, C-ITS)



Health Care

Al-based smart prescription





Energy CEMS, Zeroenergy building

Governance Digital Twin,



Culture

Job opportunity Start-up Incubation

Demand based programs

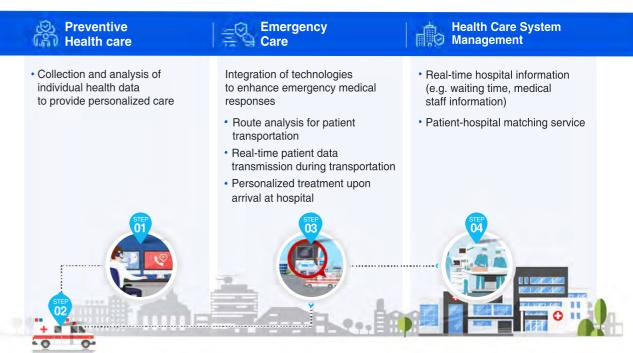






Smart Health Care

Development of a citywide healthcare test bed to facilitate access to preventive and emergency health care and improve the health care system management.



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Savings from chronic disease management improvement: 1.11 million won per year*

^{*} Annual per-patient expenditure/disease: 570,000 won/hypertension, 540,000 won/ obesity

Busan Smart City Project

The Busan Smart City envisions a high-tech waterfront city built upon data analysis and augmented reality technologies with innovations in ten areas, including smart water management, energy and robot.

The two primary areas of development in Busan will be application of the smart water management solution to the entire water management cycle (rainfall capture-purification-waste water treatment-reuse) and energy self-sufficiency by tapping into renewable energies like water and solar.





Busan

- Project Operator
 Public-private SPC
 (Busan Smart City Co.Ltd.)
- Location
 Gangseo-gu, Busan
- Area 2.7km²
- Planned Population 8,500 people
- Move-in date from 2027

10 Innovation Factors



Robot

Digital assistant, Delivery robot, Rehab robot, Robot industry cluster



LWP

Hub place that mixes learning, Work and Play



City Admin

Administration based on Al and augmented reality



Water

Water technology exhibition, Low Impact Development(LID),Smart purification plant



Energy

Renewable energy such as hydrogen fuel and hydrothermal, ESS, City integrated energy management



Education

Smart home, Smart shopping, Smart education



Health Care

Healthcare cluster, Real-time personal health monitoring



MODILIT

Total mobility solution provision by liking all mobility services



Safety

Intelligent disaster prediction system Intelligent CCTV for citizen safety



Park

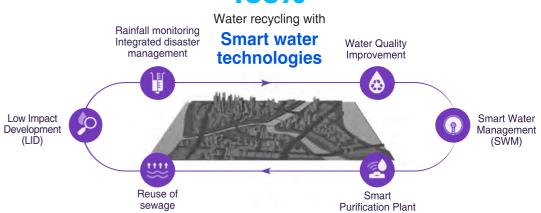
Smart park for experiencing innovations in technologies and design



Smart Water Management

Application of digital technologies to the entire water management cycle (rainfall capture-purification-waste water treatment-reuse) to become Korea's first water-specialized city

100%





Smart Energy

Production and use of renewable energy (e.g. fuel cell power plant and recycling of hydrothermal energy from rivers) to become an energy self-sufficient city.



Hydrothermal energy

By recycling ambient heat from rivers, the hydrothermal energy can meet about 10% of the energy need in the city.



08



Robot Cluster

Incorporation of robots to daily living and industries and expansion of robot-related infrastructure to become a world-renowned robotic city



05 Korea's Smart Cities & Smart Solutions

The Stories of 7 Smart Cities in Korea

In Korea,
cities faced increasing
challenges caused by rapid
economic expansion and urbanization.
"Towards a Sustainable Future: K-Smart Cities"
shows Korea's smart city development stories.

K-Smart City

From the seven cities (Seoul, Busan, Sejong, Incheon, Jeju, Gimhae, Suwon), you will find the real-life cases that show how the smart city initiatives addressed existing urban problems and made a difference to citizens' living.

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Cities today
also face complex challenges
cause by climate change, pollution,
heavy traffic, and an aging population.
Against this backdrop, cutting-edge
technologies such as the Artificial
Intelligence (AI), Internet of Things (IoT), and
Digital Twin are being leveraged to solve
various urban problems and
develop cities more sustainably.

Korea's Smart City Solutions : Best Practices and Technologies

A catalogue to introduce Korea's most innovative smart city solutions along with detailed information about them such as the solution configuration, key services, expected benefits and use cases.

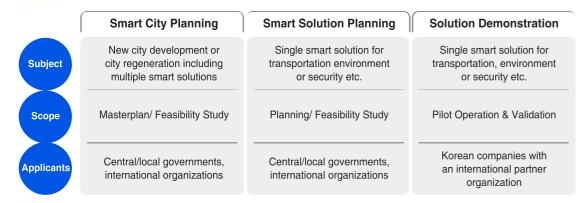


06 GLOBAL COOPERATION

K-City Network Program

The K-City Network is a global cooperation platform designed to share Korea's smart city expertise and technologies worldwide. Since 2020, 58 projects have been implemented in 26 countries, offering tailored solutions to meet local needs.

K-City Network Types



Programs Structure



Procedure



Smart City & Solution Planning Cases



Ha nam | Vietnam

Smart City Development Plan (2024)

Develop a unique smart pilot city connected to the High-Tech Park in Nhan My to stimulate the revitalization of the eastern Ly Nhan Area in the Hong River Delta.



Uman | Ukraine

Smart City Master Plan

Develop a sustainable urban development plan to enhance citizens' quality of life, and transform Uman into a tourism- and business-friendly city.



Abdullah New City | Kuwait

Design-level Diagnosis and Improvement Plan for SSAC Smart City

Diagnose the smart city plan established in 2018, and develop a realistic improvement plan for the construction of the SSAC Smart City



Tashkent | Uzbekistan

Smart City Master Plan and Pre-feasibility Study

Develop a master plan for smart city development and smart solutions to provide quality housing and expand infrastructure in response to population growth in Tashkent.

Smart Solution Demonstration Cases



Verona | Italy

ITS Road Traffic Supervision System (2024)

Develop a traffic analysis solution to optimize intersection flow using traffic big data including volume, queue length, turing movements, and vehicle classification



Hue Vietnam

3D Digital Transformation for Underground Spaces Using Smart Pin Solution

Develop a smart pin-based integrated maintenance system for the digital transformation of 2D underground facilities data into 3D



New Jersey | USA

Al-Audio based Road Hazard Information System (2024)

Develop a AI and sound-based road surface freezing detection system for highways and intersections to improve traffic safety



Siem Reap | Cambodia

Base Smart Mobility Sharing Service (2024)

Conduct a pilot operation of base-type smart mobility sharing services using electric motorcycles to reduce carbon emissions and enhance the local transportation culture



Banyumas | Indonesia

Smart City Integrated Platform Service (2023)

Conduct a pilot operation of a smart city integrated platform service through the establishment of disaster and environmental solutions and an integrated control center



Sakarya | Türkiye

Integrating High-Sensitivity Sensors&Machine Learning for Advanced Slope Failure Prediction Solution (2023)

Establish an early warning system for ground collapse based on high-sensitivity sensors and machine learning in landslide-prone areas

World Smart City Expo (WSCE)

Hosted by MOLIT every year, the World Smart City Expo (WSCE) is the largest smart city event in the Asia-Pacific region.

Delegates from government, businesses, and academia gather to discuss the latest issues and exhibit cutting-edge technologies shaping the smart city field.



Global Infrastructure Cooperation Conference (GICC) and other efforts to boost infrastructure cooperation

Also hosted by MOLIT, the GICC provides a venue for networking and project partnerships between the foreign government officials in charge of infrastructure projects and the Korean companies interested in the projects.

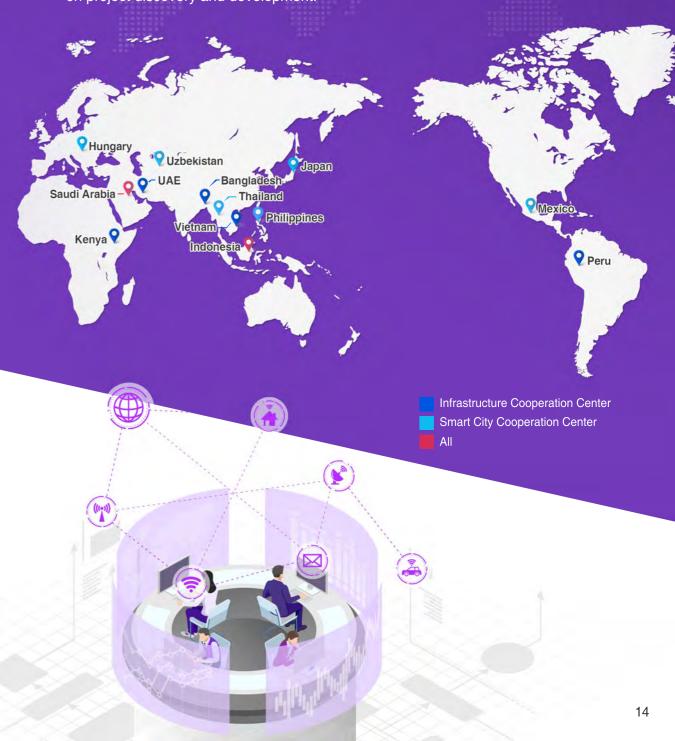
MOLIT also pursues infrastructure cooperation through other channels, including bilateral meetings, dispatching of high-level delegations and MOU signing.





Smart City & Infrastructure Cooperation Center

The Korean government establishes the Smart City & Infrastructure Cooperation Centers in countries with high potential for infrastructure cooperation with Korea. The role of the centers is to strengthen intergovernmental cooperation on smart city & infrastructure development and provide consulting on project discovery and development.



SMART CITY RELATED ORGANIZATIONS

Governments

Ministry of Land, Infrastructure and Transport

Urban Economy Division +82 044-201-3720 / Overseas Construction Division +82-044-201-3532 [11, Doum 6-ro, Sejong City] http://www.molit.go.kr/english/

Ministry of Land, Infrastructure and Transport

International Cooperation Coordination Division, International Cooperation Bureau

+82 044-201-3532 [11, Doum 6-ro, Sejong City] http://www.molit.go.kr/english/

Ministry of Science and ICT

Planning and Coordination Office International Cooperation Office International Cooperation General Manager

+82 044-202-4330 [194 Gareum-ro, Sejong Special Self-Governing City] https://www.msit.go.kr/eng/

Public Institutions

Korea Overseas Infrastructure and Urban Development Corporation

Business Development Headquarters Project Management Team

+82 02-6746-7387 [10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul] http://www.kindkorea.or.kr/eng/

Korea Agency for Infrastructure Technology Advancement

Future Strategy Group

+82 031-389-6334 [286, Simin-daero, Dongan-gu, Anyang-si, Gyeonggi-do] https://www.kaia.re.kr/eng/

Korea Research Institute for Human Settlements

Global Development Cooperation Center

+82 044-960-0217 [5 National Research Institute-ro, Sejong City] https://www.krihs.re.kr/eng/

Korea Trade-Investment Promotion Agency

Innovative Growth Headquarters Service ICT Office ICT Convergence Team

+82 02-3460-7462 [13 Heolleung-ro, Seocho-gu, Seoul] https://www.kotra.or.kr/english/

Korea Institute of Civil Engineering and Building Technology

External Cooperation and Public Relations Office External Cooperation Information Office

+82 031-910-0036 [283 Goyang-daero, Ilsanseo-gu, Goyang-si, Gyeonggi-do] https://www.kict.re.kr/eng/

Korea Transport Institute

Global Transport Cooperation Center

+82 044-211-3160 [370 City Hall-daero, Sejong City] https://english.koti.re.kr/

Korea Land and Housing Corporation

Regional Balanced Development Headquarters Global Business Department

+82 055-922-4709 [19 Chungui-ro Jinju-si Gyeongsangnam-do] https://www.lh.or.kr/eng/

Korea Water Resources Corporation

Global Business Division Global Cooperation Department

+82 042-629-4231 [200 Sintanjin-ro, Daedeok-gu, Deajeon] https://www.kwater.or.kr/eng/

Associations

Smart City Association

Business Development Global Team

+82 02-3667-3114 [855, Gyeongin-ro, Yeongdeungpo-gu, Seoul] https://www.smartcity.or.kr/

Overseas Construction Association

International Development Cooperation Center, Policy Headquarters

+82 02-3406-1078 [42, Sejong-daero 9-gil, Jung-gu, Seoul] http://eng.icak.or.kr/

Smart City Cooperation Centers

Indonesia

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Saudi Arabia

+966-11-273-4496 Ext.309 [KOTRA, Commercial Section of the Embassy of the Republic of Korea, 8th fl., King Fahd RD, Riyadh, Saudi Arabia]

Thailand

+66-2-035-1500 Ext.1550 [Unit 4101-104, 41st Floor, Bhiraj Tower at EmQuartier, 689 Sukhumvit Road, Bangkok, Thailand]

Philippines

+63-2-8894-4084 [Unit 1, 14F, Ore Central, 31st st&9th Ave, BGC, Taguig, Metro Manila, Philippines]

Japan

+81-3-5501-2847 [9F. Shinkokusai Bldg. 4-1 Marunouchi 3-Chome, Chiyoda-Ku, Tokyo, Japan]

Uzbekistan

070-7001-0442 [DX CAMPUS, Yashnabad district, Maktumkuli street, 130, Tashkent, Republic of Uzbekistan]

Mexico

+52-55-5514-3173 [Paseo de la Reforma 265, Edificio Axtel Piso 2 Col. Cuauhtemoc, CDMX, Mexico]

Hungar

+36-1-799-5402 [H-1123 Budapest, Alkotas str.50. Alkotas Point B Building, 3rd Floor]

Infrastructure Cooperation Centers

Indonesia

+62 21 5031 1061 [Treasury Office Tower, 21st Floor, Unit B, SCBD, Jakarta, Indonesia]

Saudi Arabia

+966 11 488 2211 [Korean Embassy, Amr Aldamri St, Al Safarat, Riyadh, Saudi Arabia]

Vietnam

+84 90 220 4477 [Charm Vit Tower, 9th Floor, Unit 9, 117 Tran Duy Hung St, Cau Giay, Hanoi, Vietnam]

Bangladesh

+88 013 1613 5381 [Concord I-K Tower, Unit A, Level 2, North Avenue, Gulshan 2, Dhaka, Bangladesh]

Kenya

+254 712 856 626 [Embankment plaza, 11th Floor, Longonot Road, Upperhill, Nairobi, Kenya]

UAE

+971 2 632 1970 [Flat No.204, Airline Building, Lulu St., Abu Dhabi, UAE]

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SMART CITY, LET'S BUILD IT TOGETHER.

Detail about Korea's Smart City can be found on the Smart City Comprehensive Portal

www.smartcity.go.kr

