



**WORLD SMART  
SUSTAINABLE CITIES  
ORGANIZATION**



# Introduction of WeGO

World Smart Sustainable Cities Organization  
(WeGO)

WeGO



The World Smart Sustainable Cities Organization (WeGO), established by 50 founding members in 2010, is an international association of city and local governments, smart tech solution providers, and national and regional institutions committed to the transformation of cities into smart sustainable cities through facilitating public-private partnership (PPP).

WeGO has more than 200 members around the world and serves as their international platform to improve the quality of life, innovate in the delivery of public services, and strengthen regional competitiveness.

## VISION

“Smart Sustainable Cities for All”

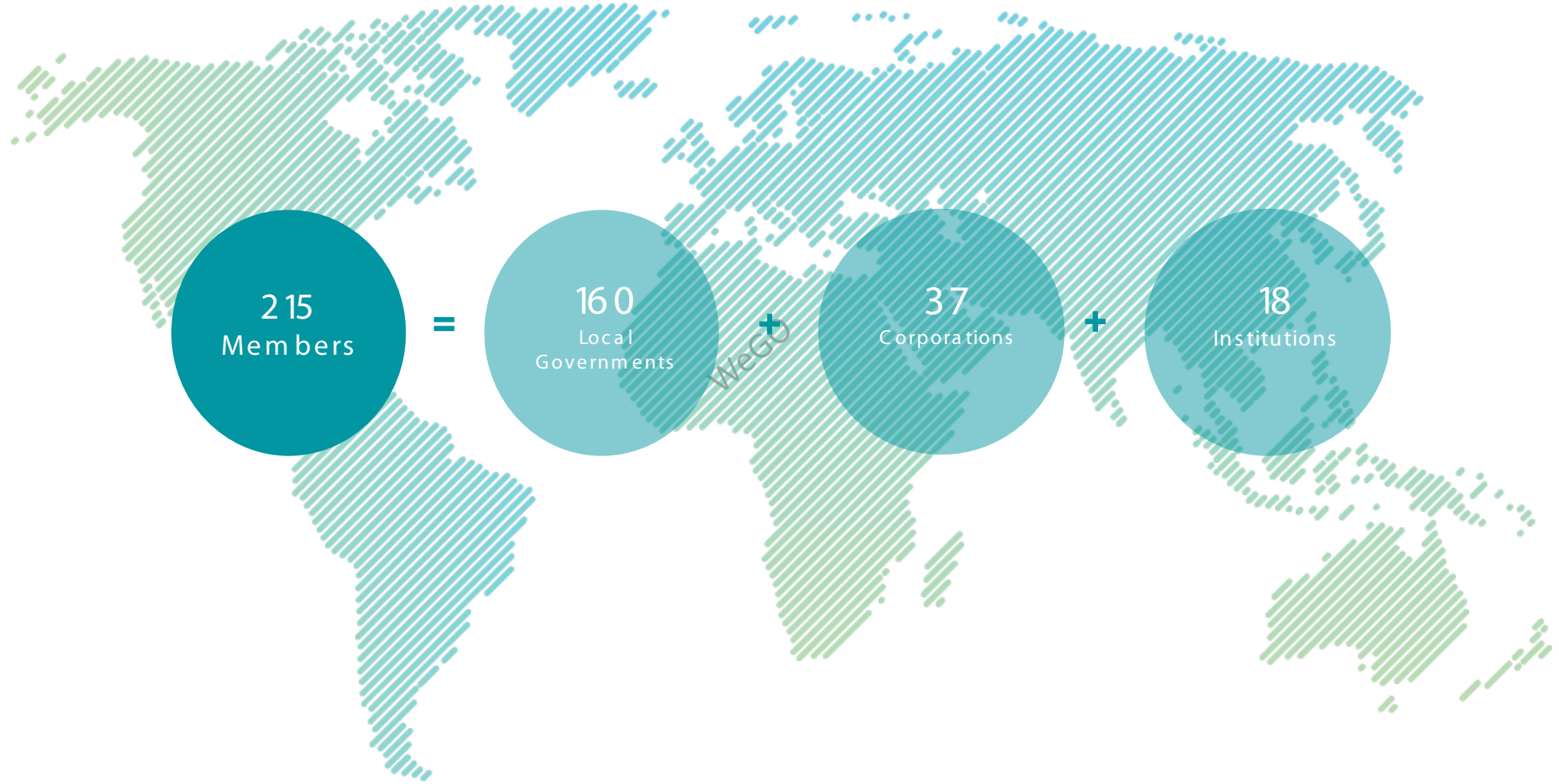
Cities that ensure enduring economic, social, and environmental sustainability by

- (1) exploiting the power of digital technologies
- (2) engaging city leaders and communities,
- (3) integrating across sectors and disciplines,
- (4) accessing investment for smart sustainable cities development to improve the efficiency of urban operation and services, quality of life, and economic prosperity and services for their communities.

## MISSION

- WeGO promotes and facilitates the worldwide transformation of cities to smart sustainable cities
- WeGO is a global platform for cities and their partners to leverage their innovation potential, enhance their digital capabilities, promote digital ethics, and develop transformative solutions for smart sustainable cities
- WeGO fosters and improves international exchange, cooperation, project implementation, and learning amongst cities and with their partners.









## AFRICA | 47

<b>Cameroon</b>	Andek, Batibo, Tubah
<b>Ethiopia</b>	Addis Ababa
<b>Ghana</b>	Accra
<b>Kenya</b>	Nairobi
<b>Morocco</b>	Rabat
<b>Mozambique</b>	Maputo
<b>Nigeria</b>	Abuja, Calabar, Donga, Gassol, Jalingo, Kaduna State, Karim-Lamido, Kurmi-Baissa, Pupule Yorro, Sardauna-Gembu, Sokoto State, Takum
<b>Rwanda</b>	Kigali
<b>Senegal</b>	Dakar
<b>South Africa</b>	Tshwane
<b>Sudan</b>	East Nile Locality, Elkhawi Locality, Gadarif City, Gadarif State, Gezira State, Hasahisa, Kassala State, Khartoum Locality, Khartoum State, North Kordofan State, River Nile State, Sennar State, Shaikan Locality, South Gezira Locality, Umelgoura Locality, White Nile State
<b>Tanzania</b>	Dar es Salaam
<b>Tunisia</b>	La Marsa, Menzel Jemil, Tunis
<b>Uganda</b>	Kampala
<b>Zambia</b>	Kasama, Lunte
<b>Zimbabwe</b>	Harare

## EUROPE | 17

<b>Belarus</b>	Minsk
<b>Belgium</b>	Brussels
<b>France</b>	Paris
<b>Germany</b>	Berlin, Frankfurt
<b>Netherlands</b>	Rotterdam
<b>Romania</b>	Bucharest
<b>Russia</b>	Magas, Moscow, Vladivostok
<b>Turkey</b>	Ankara, Antakya, Beyoğlu, Gaziantep, Malatya, Muğla

## MIDDLE EAST | 8

<b>Iran</b>	Isfahan, Shiraz, Tabriz
<b>Iraq</b>	Erbil
<b>Oman</b>	Muscat
<b>Palestine</b>	Hebron, Ramallah
<b>United Arab Emirates</b>	Abu Dhabi



### AMERICAS | 14

<b>Argentina</b>	San Antonio de Areco
<b>Brazil</b>	Porto Alegre, São Paulo
<b>Costa Rica</b>	Buenos Aires
<b>Dominican Republic</b>	Villa Tapia
<b>Ecuador</b>	Cuenca
<b>Mexico</b>	Coatzacoalcos, Mexico City
<b>Paraguay</b>	Asunción
<b>Peru</b>	Lima, Cusco, Urubamba
<b>United States</b>	Pittsburgh, San Francisco
<b>Venezuela</b>	Caracas

### ASIA-PACIFIC | 74

<b>Azerbaijan</b>	Baku
<b>Bangladesh</b>	Dhaka North, Dhaka South, Rajshahi
<b>China</b>	Chengdu, Dujiangyan, Hong Kong SAR, Ningbo, Zhejiang Province
<b>Fiji</b>	Suva
<b>India</b>	Agra
<b>Indonesia</b>	Bandung, Batam, Bau-Bau, Jakarta, Riau Islands, Serang Regency
<b>Japan</b>	Saga Prefecture
<b>Kazakhstan</b>	Almaty, Nur-Sultan
<b>Korea</b>	Anyang, Gimpo, Goyang, Jeju, Sejong, Seongnam, Seoul
<b>Malaysia</b>	Penang Island, Seberang Perai
<b>Mongolia</b>	Altai, Choibalsan, Erdenet, Sainshand, Ulaanbaatar
<b>Nepal</b>	Belbari, Bhadrapur, Bharatpur, Birgunj, Dharan, Dhulikhel, Itahari, Kathmandu, Kankai, Patharishanishchare, Pokhara, Ramgram, Ratuwamai, Shivasatakshi, Sunawarshi, Sundarharaicha, Sunwal, Tarakeshwor
<b>New Zealand</b>	Wellington
<b>Pakistan</b>	Islamabad, Peshawar
<b>Philippines</b>	Baguio, Cauayan, La Union, Makati, Manila, Quezon City, San Fernando La Union
<b>Sri Lanka</b>	Dambulla, Galle, Matale, Sri Jayawardenapura Kotte
<b>Thailand</b>	Bangkok
<b>Uzbekistan</b>	Tashkent
<b>Vietnam</b>	Da Nang, Ha Noi, Thua Thien Hue

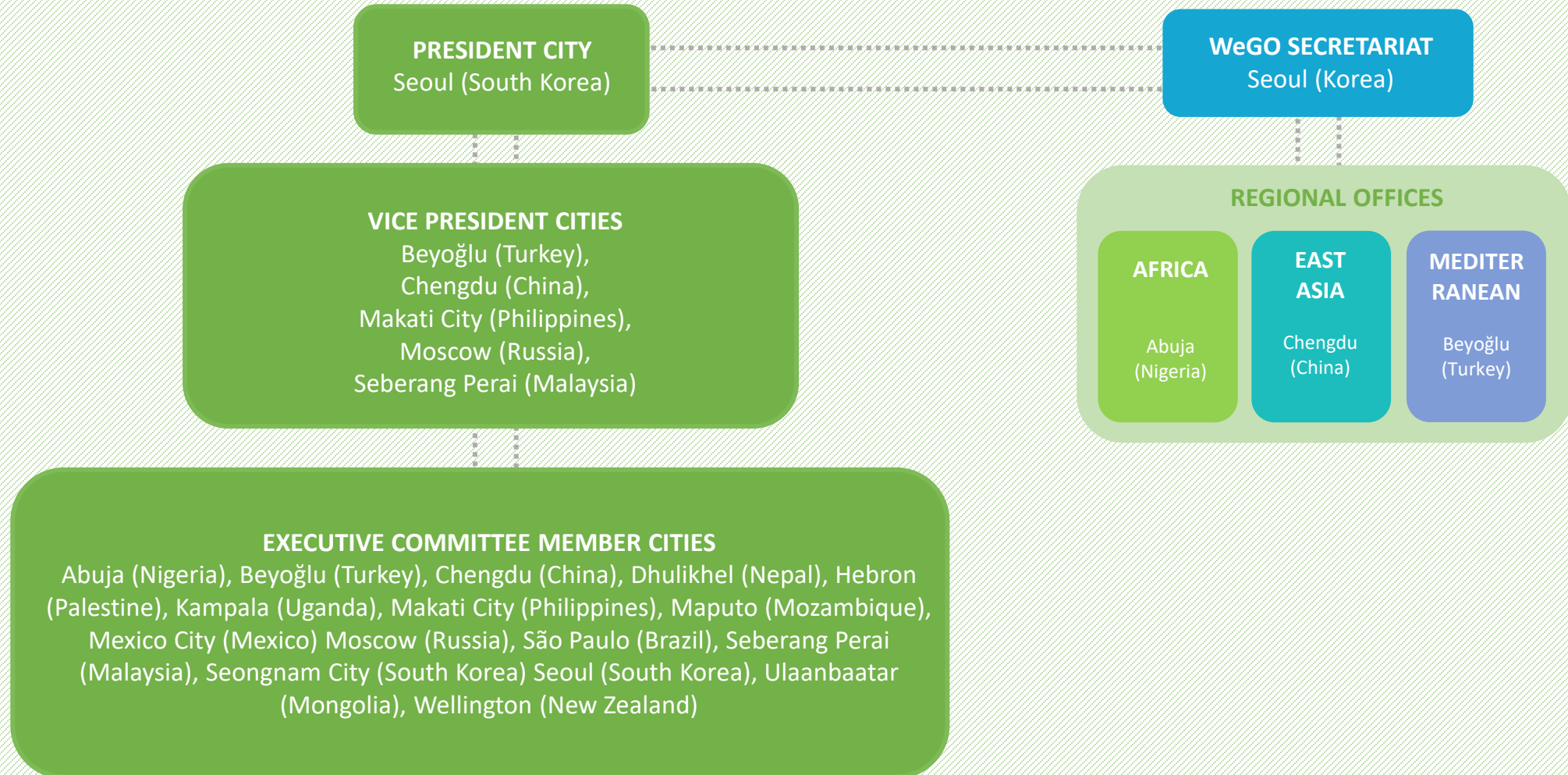
# About WeGO WeGO's Network



ASIAN DEVELOPMENT BANK



WeGO





# WeGO's Priority 2023





The new digital age, the **4th Industrial Revolution** has emerged.

The connectivity of AI, big data, cloud computing, and IoT into our daily lifestyle is evolving into the norm. In the post-pandemic era, AR, VR, and metaverse is no longer the far future.



ESG is the concurring new norm intertwined with corporations and smart city development.

**Smart cities with ESG**-based practices promote the economic development of a municipality, region, or country through sustainable management of cities, which focuses on developing healthy ecological cities, incorporating citizens, and strengthening social and environmental engagement.

WeGO stands to be a part of the green transition in cities and people's lives.





## Digital Ethics

Digital divide will widen and as the underprivileged who used offline services, digitalization will create polarization.

## Digital Security

## Cyber Environment

Social problems occur first in a cyber environment and then in real life. Fake transactions, fake news, sexual crimes, financial fraud, etc.



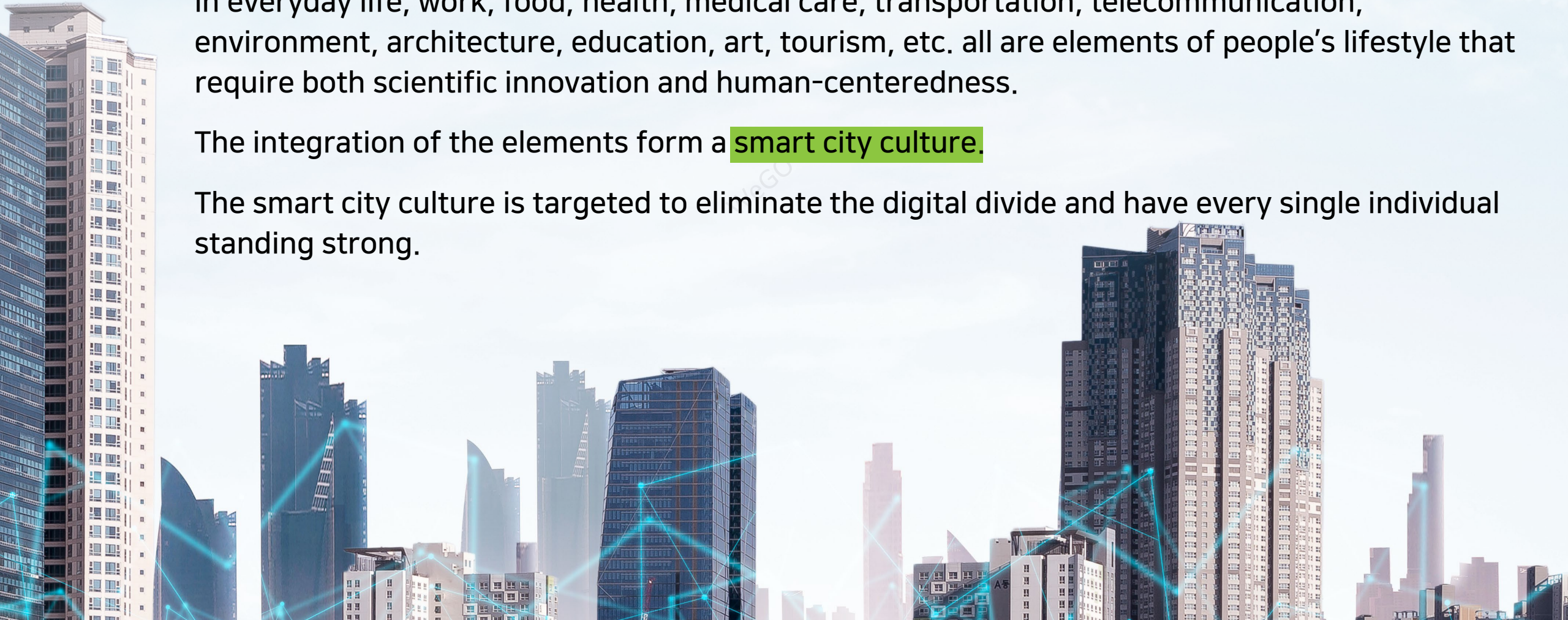


Smart cities no longer technology or ICT policies but culture.

In everyday life, work, food, health, medical care, transportation, telecommunication, environment, architecture, education, art, tourism, etc. all are elements of people's lifestyle that require both scientific innovation and human-centeredness.

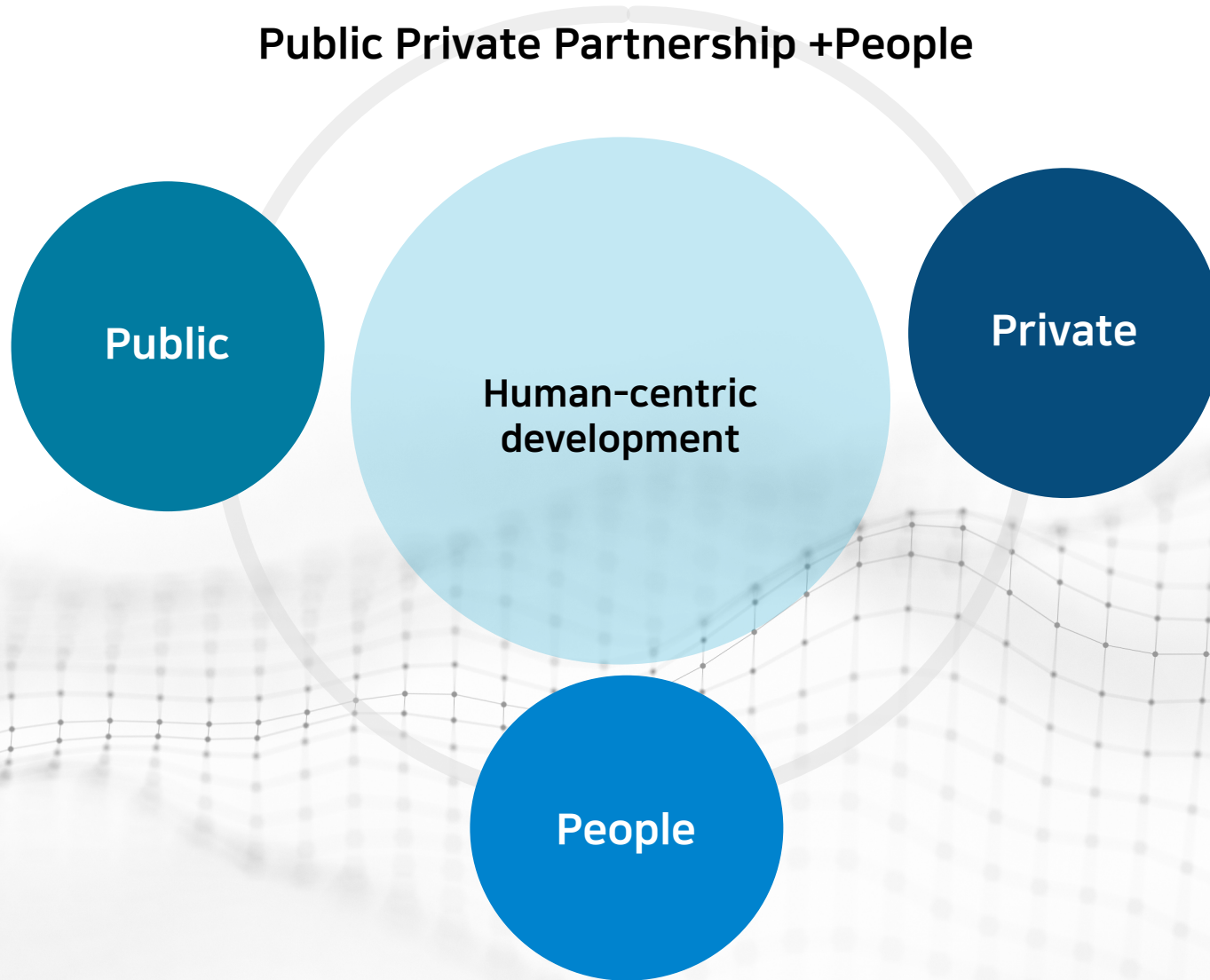
The integration of the elements form a **smart city culture.**

The smart city culture is targeted to eliminate the digital divide and have every single individual standing strong.





**Public Private Partnership +People**



# WeGO Activities







## Seoul Smart City Prize

Seoul Smart City Prize, a newly established international prize to give recognition towards projects focusing on people-centered digitalization in all cities worldwide.

The theme of 2023: *Fostering digital transformation through innovative and inclusive approaches for smart sustainable cities.*



### Tech-InnovaCity

Projects that focus on sustainability with technological novelty or transforming existing technology that contribute to smart city development.



### Human-CentriCity

Projects that are designed to prioritize digital inclusion in smart city development, and aim to serve all vulnerable members of society.



### Leadership

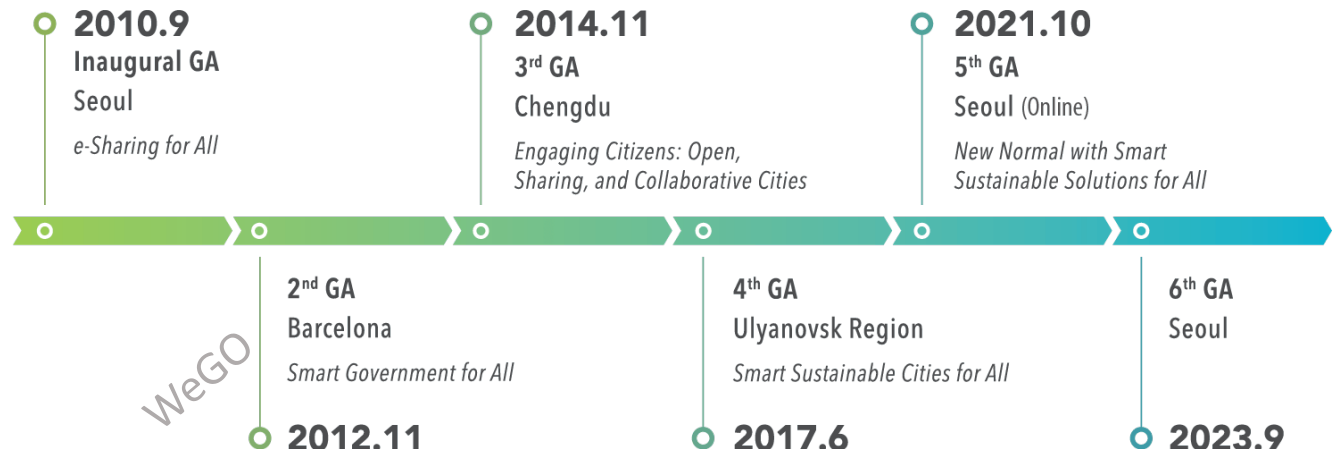
Individual candidates who have demonstrated exceptional leadership in executing inclusive smart city initiatives.





September 24-26, 2023 | Seoul

## The 6th WeGO General Assembly



### Highlights:

- Shaping the direction of WeGO's activities and programs for the next three years
- One and only in-person gathering of global WeGO members and partners sharing smart city know-hows and experiences
- Election of new president & vice-president cities, new EXCOM members
- Establishing new Regional Offices
- Selection of host cities for the 2024 EXCOM Meeting and the 7th WeGO General Assembly



Project Implementation & Matchmaking



Capacity-building



Research & Development



Knowledge-sharing & Networking



Regional Activities



Governance Activities



## WeGO Advisory Board

An experienced group of advisory board members provide insights and guidelines to the secretariat as WeGO carries out its missions and activities for members and partners.



**Alexandre Hedjazi**  
Professor of University of Geneva



**Danielle Suh**  
CEO of EIOB



**Hanna Yoon**  
Professor of Soongsil University



**Joo Seok Oh**  
Professor of Korea University



**Jung Hoon Lee**  
Professor of Yonsei University



**Byoung Joon Kim**  
Professor, Department of Public  
Administration of Kookmin  
University



**Daniel Oh**  
Professor of Korea University



**Danil Kerimi**  
Chief Operating Officer & Founder  
of Edgelands Institute



**Gyo Gun Lim**  
Professor, MIS at School of  
Business of Hanyang University



**Hong Chun Lee**  
Professor of Dongguk University



**Yves Daccord**  
Executive Chairman & Co-founder  
of Egdeldans Institute



**Seok Won Lee**  
Professor of Seoul National  
University



**Junseok Hwang**  
Professor of Seoul National  
University



**Kyu Hun Kim**  
Head Attorney of QLEX Law Office



**Matteo Tarantino**  
Professor of Catholic University of  
Milan



**Sei Yong Kim**  
Professor of Korea University



**Yu Mi Lee**  
Professor of Seoul National  
University



**Jae Eun Shin**  
Research Professor, Institute for  
Global Engagement and  
Empowerment of Yonsei  
University



**Jong Sung Hwang**  
President of National Information  
Society Agency (NIA)



**Joon Oh**  
Eminent Scholar Professor of  
United Nations studies of Kyung  
Hee University



**M. Jae Moon**  
Underwood Distinguished  
Professor of Public Policy and  
Management of Yonsei University



**Miree Byun**  
Director and Senior Research  
Fellow, Urban Monitoring Center  
of Seoul Institute



**Sung Jin Kang**  
Professor of Korea University



**Young Im Cho**  
Professor of Department of  
Computer Engineering of Gachon  
University



## MATCHMAKING -SOLUTION MEET CITIES

Find a right solution provider to solve your city challenges



Share your current city challenges with WeGO and have a matchmaking session with solution providers from WeGO network.

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Discuss and share your smart city plans with the WeGO network.

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Gain inspiration from smart city best cases from our WeGO members and partners





*Year-round*

## PROJECT IMPLEMENTATION - Feasibility Studies and Project Implementation

Reach your smart city goals with project implementation opportunities.



Share your ready-made project proposal with WeGO and establish direct project partnerships within the WeGO network.



Become a beneficiary city or solution provider of WeGO Smart Sustainable City Feasibility Study Program.



Apply for partner smart city funding programs through consultation and support from WeGO.



### *Year-round*

## PROJECT IMPLEMENTATION - Feasibility Studies and Project Implementation

Some of the latest Feasibility Studies carried by WeGO include:

- 2022- Lima, Peru - WeGO-NIA Feasibility Study for “Lima Smart Tourist Destination”
- 2019- Kampala, Uganda - The Unified Smart Parking Platform
- 2018- Da Nang, Vietnam - Data Analytics for Smart Traffic
- 2017- La Marsa, Tunisia - Smart Waste Management System
- 2016- Seberang Perai, Malaysia - Smart Street Lamp & Traffic Light Monitoring System





*June / Online*

## TRAINING PROGRAMS- WeGO-SHRDC Smart Sustainable Cities Training Program



This member-exclusive program is co-organized annually with our partner the Seoul Human Resource Development Center (SHRDC) and aims to provide city officials with in-depth knowledge of Seoul's best practices and policies in the field of smart city development.

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*June / Seoul*

## TRAINING PROGRAMS- WeGO-NIA Joint Workshop



This member-exclusive program is co-organized annually with our partner the Seoul Human Resource Development Center (SHRDC) and aims to provide city officials with in-depth knowledge of Seoul's best practices and policies in the field of smart city development.



*June / Hybrid*

## TRAINING PROGRAMS- WeGO Smart City Champions

The youth program aims to build the capacity of young people around the world in the fields of urban development, sustainability, and smart cities.



Phase 1 : Lectures that aim to equip participants with conceptual knowledge of smart cities



Phase 2 : 3-day capacity-building workshop where students will convene and work together in teams to come up with innovative solutions to smart city challenges.

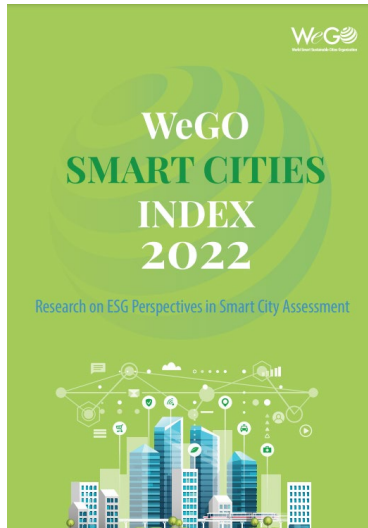






## R&D-WeGO Smart Cities Index: ESG Perspective

This index aims at setting the global agenda in the smart cities community by collecting data from WeGO Member Cities around the world, assessing the smart development stages of the cities, and publishing a report.



The Index aims at serving as a guideline and reference to cities in the world to learn smart city experiences from each other. WeGO Member Cities will be able to understand their development stages in the world in terms of smart sustainable development, and identify areas to improve and benchmark other model cases.

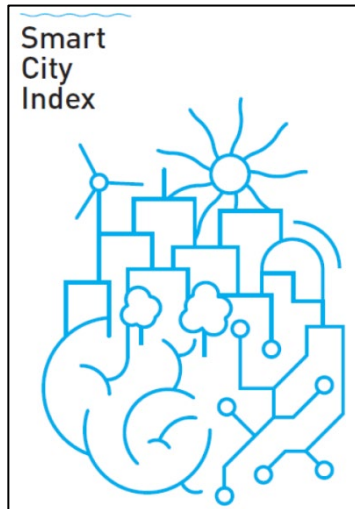


The WeGO Secretariat has successfully published a research report titled “WeGO Smart Cities Index 2022: Research on ESG Perspectives in Smart City Assessment”. The WeGO Smart Cities Index 2022 collected data from thirteen (13) WeGO Member Cities. This enabled WeGO to analyze the smart city development via the Environmental, Social, and Governance (ESG) aspects.



## R&D-WeGO-IMD Smart City Index Research

In partnership with the International Institute for Management Development (IMD), WeGO presents a globally recognized index and an analysis report that will serve as a guideline and reference to cities in the world to learn smart city experiences from each other. In line with WeGO's core value on 'people-centric' smart city development, WeGO and IMD's Smart City Observatory, will focus on a citizen-centric definition and evaluation methodology of a smart city for the index.



IMD publication of the 2022 -2023 edition of the Index & the launching ceremony: April 4, 2023



IMD-WeGO Index forum: September, 2023



IMD-WeGO publication of a set of Smart Cities case studies: October, 2023



## KNOWLEDGE-SHARING & NETWORKING

In line with the WeGO 2030 Master Plan, WeGO will continue its expansion and outreach strategy to further engage the global community. Leveraging opportunities held worldwide including conferences and forums, WeGO will share its vision and mission to identify new cities, corporates, and institutions that will become part of WeGO's network for further collaboration.

- [WSIS Forum 2023](#) *Mar 13-17 | Geneva*
- [Smart City Summit & Expo](#) *Mar 28-31 | Taipei*
- [AIM 2023](#) *May 08-10 | Abu Dhabi*
- [World Smart City Expo 2023](#) *Sep 06-08 | Seoul*
- [Smart City Expo World Congress](#) *Nov 07-09 | Barcelona*
- [COP 28](#) *Nov 30-Dec 12 | Dubai*





## REGIONAL ACTIVITIES

Regional platforms for members to exchange knowledge and foster cooperation on smart city development.

Africa  
Smart Cities Network  
(AFSCN)



Latin America  
Smart Cities Network  
(LASCN)



China-Japan-Korea  
(CJK)



ASEAN  
Smart Cities Network  
(ASCN)



### Africa Smart Cities Network (AFSCN)

UNOSD International Mayors Forum

*April | Dakar, Senegal*



### Latin America Smart Cities Network (LASCN)

Smart City Expo Latam Congress

*May | Merida, Mexico*



### China-Japan-Korea (CJK)

ASEAN Smart Cities Network (ASCN)





## Host City for the WeGO 2024 Executive Committee Meeting

*Application period: March 1, 2023 ~ July 15, 2023*

The WeGO Executive Committee (EXCOM), WeGO's main decision-making body, convenes annually to review the Secretariat's activities and accomplishments in the past year and to decide on key agenda items guiding the organization's direction for the future.

## Host City for the WeGO 7th General

*Application period: March 1, 2023 ~ July 15, 2023*

GA is WeGO's triennial flagship event, it gathers both members and non-members to shape the key agenda that will help chart WeGO's direction for the next three years. The event features various smart city sessions and workshops, a Mayors' Roundtable, a CIO Forum, the Executive Committee (EXCOM) Meeting, and the GA itself.





## Host City for WeGO Regional Offices in Europe, Middle East, South East Asia, and Latin America

*Application period: March 1 ~ July 15, 2023*

Regional Offices are an extension of WeGO to expand the network by organizing smart city activities, inviting new members, and initiating knowledge exchange and cooperation while providing support for WeGO and prospective members from the corresponding region.



MAC CHARMAN



Thank you!

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 World Smart Sustainable Cities Organization

 <https://we-gov.org/>

동행·매력  
특별시 서울

SMART  
SEOUL

WeGO  
World Smart Sustainable Cities Organization

# “SEOUL SMART CITY PRIZE”





## Why do cities need to transform?

While the current global pandemic has only accelerated digital transformation, it has caused numerous people, especially vulnerable groups, to be excluded from the benefits of a digital society and has widened the digital divide even further.

In times like these, it is more important than ever to shape the future of cities to become “people-centered” in encompassing the vulnerable and in providing more accessible services for all citizens.



# Leaders of Smart City Development

Established by 2010 by 50 founding cities, the World Smart Sustainable Cities Organization (WeGO) was established to promote e-government and smart city exchanges between cities around the world and continues to serve as a leader in accelerating digital transformation.



Together with the President City, the Seoul Metropolitan Government and WeGO announce our commitment to create an agenda that promotes the global efforts in building inclusive and citizen-centric cities.



PPPP



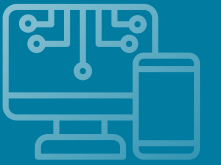
동행.매력



# WeGO and Seoul Metropolitan Government's Vision



Seoul Metropolitan Government and WeGO are committed to promoting and ensuring an inclusive digitalization of public services that benefit all people in sectors ranging from mobility, safety, welfare, energy, environment, culture, and governance.



As Seoul Metropolitan Government and WeGO are cognizant of the importance of an innovative yet inclusive smart city model that looks after underprivileged groups, we will pursue cooperation with fellow cities, companies, and organizations around the world to find exemplary cases and commend them through the Seoul Smart City Prize.





“

To foster digital transformation through innovative and inclusive approaches for smart sustainable cities,

we present the **Seoul Smart City Prize**

”



# Prize Category

## Tech-InnovaCity



Projects that focus on **integration of innovative policies and technologies in all sectors** of society and domains ranging from sustainable environment, energy, culture, and governance.

Ex) Popularization of autonomous driving, AI chatbot counseling, Metaverse public administration services

## Human-CentriCity



Projects that are designed to prioritize digital inclusion in smart city development, thereby overcoming or mitigating the digital divide, and that aim **to deliver services for specific target groups** among the citizen population, such as the elderly, youth, and the disabled.

Ex) Education to bridge the digital gap and location tracker for the elderly with dementia

## Leadership



**Individuals who have demonstrated leadership** in developing or promoting the innovative use of technology and data to enhance the lives of global citizens.

Ex) Government officials, Entrepreneurs, Social activists, Experts, Citizens

# Eligibility

## Cities

**Local governments of cities**  
of all size that have developed  
and implemented policies that align  
with one of the Prize categories

## Companies

**For-profit businesses**  
**in the private sector**  
that have actively engaged and invested  
in one of the Prize categories

## Institutions

**Governmental and non-governmental**  
**organizations, international organizations,**  
as well as think tanks and universities  
that have designed and carried out projects  
that match one of the Prize categories

## Individuals

**Any individual who has demonstrated**  
**leadership** in developing  
or promoting the innovative  
use of technology and data to enhance  
the lives of global citizens



# Evaluation Criteria



# WEGO Objectives of the Prize

## SEOUL SMART CITY PRIZE

Promotion of the **people-centered digital transformation** by recognizing cities, companies, institutions, and individuals for their efforts of digitalization that benefit even the vulnerable populations with tech-driven solutions

Expansion of smart cities focusing on the theme of **inclusive development**

**Exchange of best practices, know-hows and solutions** among smart cities for providing more accessible services for all citizens

**Engagement of the global community** in shaping the future direction of digitalization by offering a space for discussion

Establishment of partnerships through **networking and learning opportunities** among relevant stakeholders through participation in the Seoul Prize



# Prize Winners

WeGO



**Tech-InnovaCity Prize and Human-CentriCity Prize:** 3 winners from each of the two categories (6 total prizes)

**Leadership Prize** 2 individuals who demonstrated outstanding leadership in championing the people-centered smart city initiatives

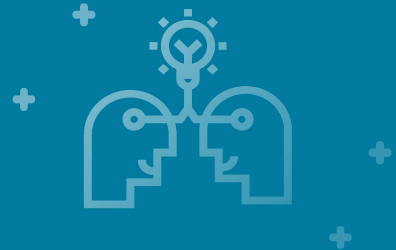
**Special Mention:** 1 project selected by a partner international organization

**Special Mention:** 2 cities selected on the basis of the WeGO Smart City Index Report

Awarded at the **Seoul Smart City Prize Ceremony** during the World Cities Summit 2023 hosted by the Seoul Metropolitan Government

Invited to a tailored **capacity building training program** in Seoul to experience peer to peer knowledge exchange and share know-hows in advancing human centered city development.

Given an opportunity to collaborate with the Seoul Metropolitan Government on a smart city project on various models including but not limited to **feasibility study, a pilot implementation, and triangular cooperation, and collaborative demonstration.**



# Seoul Smart City Prize Ceremony & World Cities Summit Mayors Forum

**Date** September 2023

**Venue** Seoul



# Prize Timeline





WeGO

# Apply to the Seoul Smart City Prize



[www.seoulsmartcityprize.com](http://www.seoulsmartcityprize.com)



Contact us at  
[info@seoulsmartcityprize.com](mailto:info@seoulsmartcityprize.com)

WeGO





# Seoul Smart City Prize

- Collaboration Opportunities on a Smart City Project

Seoul Urban Solutions Agency

# Collaboration with SMG on a smart city project

## Collaboration Type

- ① **Pre-feasibility study and a pilot implementation** on the submitted or extended/related smart solutions
- ② **Joint R&D/Collaborative demonstration** of new technologies and social innovative solutions
- ③ **Joint Workshop and Producing knowledge products** for knowledge dissemination and promotion

# Seoul's Policy Sharing Initiative

*From war-torn ruins to thriving metropolis*



1950 / GNI per capita: US\$ 82



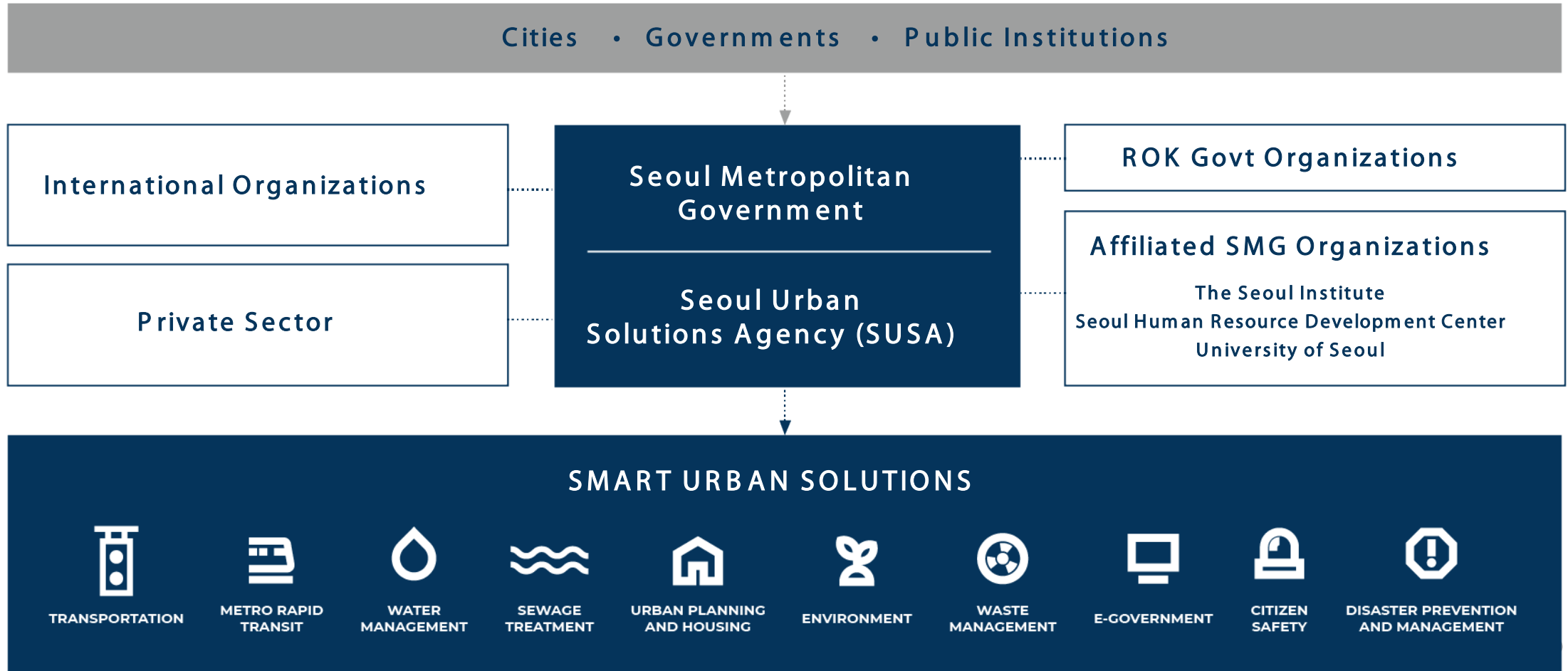
2023 / Smart Sustainable City

Seoul's unique urban development experiences :

- **Limited natural resources and financing**
- Rapid population growth within limited land space
- **Efficient solutions to address urban challenges** within a short timespan
- **Cooperative Governance**: collaboration with policy leaders, experts, and private sector innovations

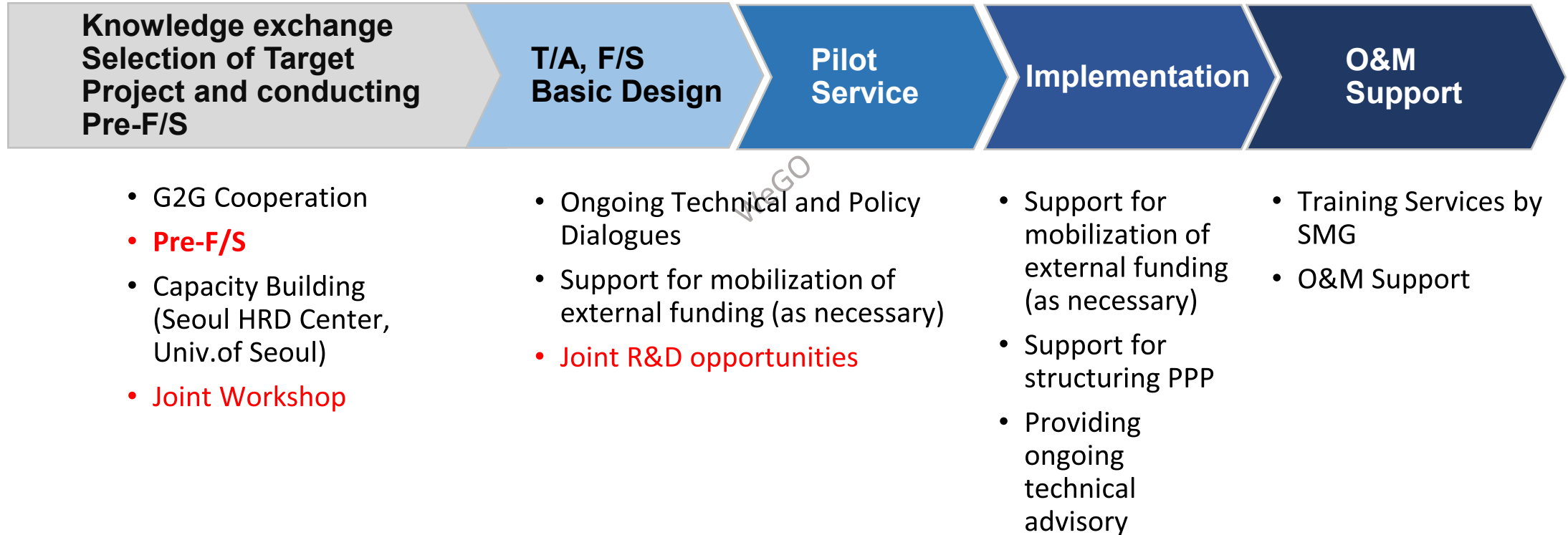
WeGO

# Seoul Solutions: Effective Platform





# Project Development Process



# Seoul Smart Urban Solutions



**SMART WATER  
MANAGEMENT**



**SMART  
ENERGY**



**SMART WASTE  
MANAGEMENT**



**SMART  
TRANSPORTATION**



**SMART  
GOVERNANCE**



**SMART  
URBAN PLANNING**

<p>Arisu Combined Information System</p> <ul style="list-style-type: none"> <li>• Production Management</li> <li>• Water Supply Management</li> <li>• Facility Control</li> <li>• Water Quality Testing</li> </ul>	<p>One Less Nuclear Power Plant Program</p>	<p>Resource Recovery Facility (WTE)</p>	<p>Integrated Public Transportation and Quasi Public Bus Operations</p>	<p>Smart Transparency</p> <ul style="list-style-type: none"> <li>• E-Tax System</li> <li>• CCS</li> </ul>	<p>2030 Urban Plan Multi-core City System</p>
<p>Smart Metering</p>	<p>Solar City Seoul</p>	<p>Waste Volume Reduction Policies</p>	<p>Bus Rapid Transit</p>	<p>Integrated Smart Platforms and Data Management</p> <ul style="list-style-type: none"> <li>• Data Center</li> <li>• Digital Mayor's office</li> </ul>	<p>Land Partitioning System</p>
<p>Advanced Water Purification System</p>	<p>Magok Smart Energy City</p>	<p>Rehabilitation of Decommissioned Landfills</p>	<p>Integrated Traffic Fare System (TOPIS)</p>	<p>Big Data</p> <ul style="list-style-type: none"> <li>• Night Bus</li> <li>• Market Analysis Service</li> </ul>	<p>Redevelopment of Faulty Residential sites</p>
	<p>Building Retrofit Program</p>		<p>Shared Mobility (Share Bikes)</p>	<p>Open Citizen Participation</p> <ul style="list-style-type: none"> <li>• Democracy Seoul</li> <li>• M-voting</li> <li>• Open Data Plaza</li> </ul>	<p>Seoullo 7017</p>
					<p>Bukchon Hanok Village Preservation</p>
					<p>Chyeonggyecheon Stream Preservation</p>

# Smart City Cooperation Projects

- City to City Cooperation and external funding arrangement cases

# Innovative Solutions for Urban Mobility in Almaty and Tashkent (2021-23)



Project to support Almaty and Tashkent by bringing international experience in smart solutions to tackle urban mobility issues mainly congestion and transport emissions.

## CHALLENGES & ISSUES

### ➤ Traffic Congestion

- Increasing car ownership
- Old car issues



Congestion in Tashkent

### ➤ Air Pollution

- Air quality decreasing
- Traffic congestion's influence



Pollution in Tashkent

### ➤ Disasters (Flooding, Heavy Snow, Pandemic)

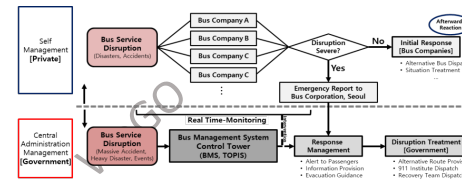
- Flooding caused by heavy rains, melting Snow
- Annual heavy snow issues
- Abnormal climate situations
- Response to COVID-19



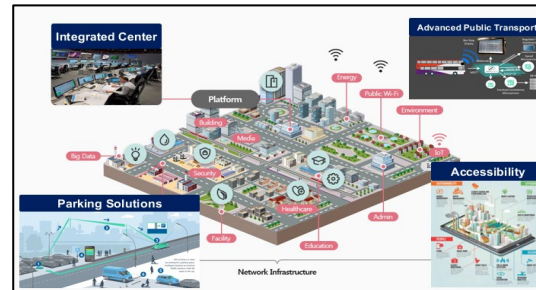
## T/A, CONSULTING

### 1) Enhancing Public Transport Resilience

#### Operational Procedures in Case of Disruptions



### 2) Smart City Solutions (Mobility Management)



### 3) Capacity Building



## Potential Investment Projects

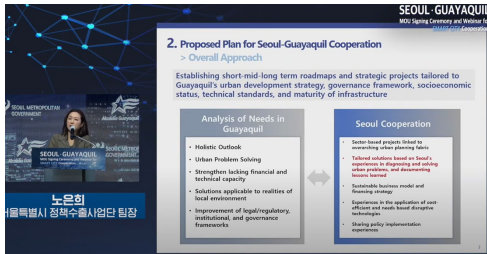
- Advanced Traffic Management System
- Integrated Data Platform
- Mobility Hub
- Low Emission Zone, etc.



# Seoul-Guayaquil Cooperation Projects for Smart City

**koetra**  
Trade Investment 24

**KOICA**  
Korea International  
Cooperation Agency



\* Source: SMG News (2020), SUSA

## CHALLENGES & ISSUES

- Public Transit System Improvement
- Urban Safety (Women's Safety)
- Data Governance
- Local Economic Development (Sustainable Tourism)

## BENCHMARKING of SEOUL

- Smart Transportation (TOPIS)
- IT Governance / Institutional Framework
- Data Platform(S-Data)
- Smart City Services

## INTERVENTION

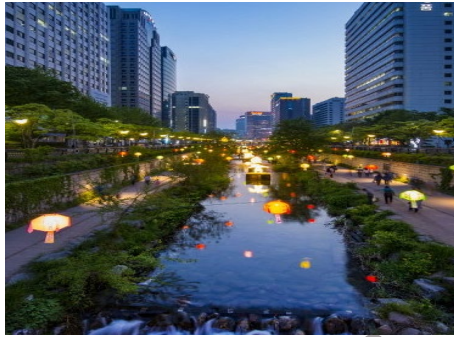
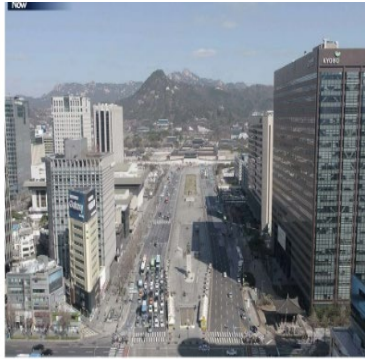
- Cooperation Project Identification (2018-19) with KOTRA
- Seoul-Guayaquil Smart City Forum (2020)
- Smart City Master Plan (KSP) (2020-21)
- Capacity Building for Smart City (CIAT: KOICA Global Training Program) (2022-24)
- Implementation Projects Formation (Ongoing)

WeGO

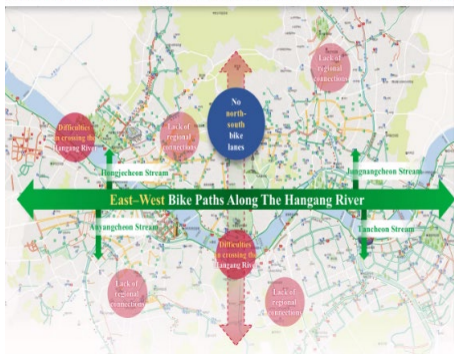
# Seoul-Dublin Urban Cooperation Action Plan (U-CAP)



## SEOUL



There are major bike lanes that go east to west along the Hangang River, but there needs to be more bike lanes that go north to south and in more areas



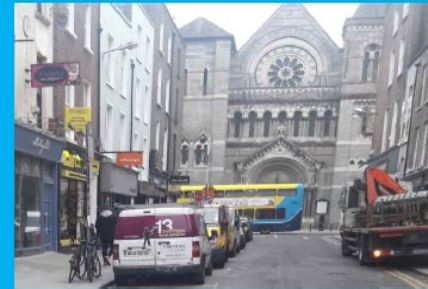
Creating a place for a citizen to walk without distraction

Bike lanes with innovative solutions

## DUBLIN

### Pedestrian Improvements

- Increased Footpath Widening
- Extensive Build out Program to facilitate Outdoor Dining



South Anne Street - Before



South Anne Street - After



Cooperation on exchanging best practices on green mobility and walkable city



# Seoul's Global Footprint



**35+**  
COUNTRIES

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**61+**  
CITIES

---

**83+**  
PROJECTS

\*as of Sep 2019



- Seoul Solution [www.seoulsolutions.kr](http://www.seoulsolutions.kr)
- Urban SDG Knowledge Platform [www.urbansdgplatform.org](http://www.urbansdgplatform.org)
- Seoul Campus

Photo Source: SMG (2018) Seoul Policy Sharing Initiative

Thank you.





Final Report

# WeGO Smart Cities Index 2022

**Building More Inclusiveness and Sustainability-Driven Smart City  
Assessment: Introducing New Themes in Environmental, Social, and  
Governance Disclosure**

Smart Sustainable Cities for All  
WeGO



# CONTENTS

- 01** Introduction of the Research
- 02** Smart Cities Index in Existing Studies
- 03** Main Findings of the WeGO SCI
- 04** Benefits of Main Findings
- 05** Expected Effects & Implications

# 01 Introduction of the research

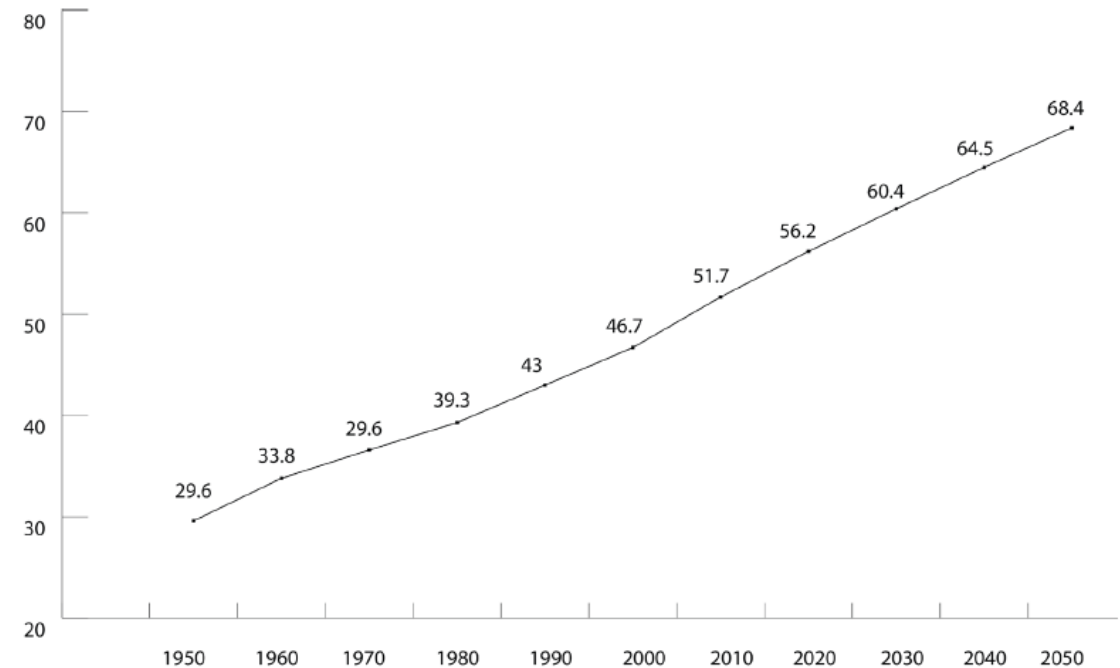
## Today's cities face significant challenges

1. Increasing population
2. Pollution
3. Resource usage
4. Lack of physical and social infrastructure
5. Lack of sustainable economic growth

## Existing concept of 'Smart City' problem

- Widely balanced distribution of indexes
- Unclear role of stakeholders in the policy implementation process
- Limited assessment of inclusive concept of sustainability

Diagram 1. Percentage of Population in Urban Areas from 1950 to 2050



Source: United Nations, Department of Economic and Social Affairs, Population Division (2018). File 3: Urban Population at Mid-Year by region, subregion and country, 1950-2050 (thousands). (<https://population.un.org/wup/Download/>).

# Introduction of the research

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## Why is ESG important in Smart Cities development?

- Recently, studies in economics and business have actively cited the ESG activities that have embedded in corporate firms as the instructional and managerial guidance to promote sustainable growth
- Since not only ESG activities of rational firms are limited to policies and regulations that a city government has exercised, but smart cities have made a considerable effort to increase the **sustainable development** as well as the long-term value creation **to meet the stakeholders' expectations in a community**
- It would be more efficient to integrate with multiple information including **ESG and ICT issues** to measure the smartness of cities

## The goal of research

- To suggest an original and distinct smart cities index (SCI) that prioritizes ESG criteria that specify **socially responsible governance** and **sustainable development practice of city government**
- To suggest and develop the ESG-based smart city index of cities with a great presence of **ICT applied to critical social inclusion and responsibility** that contemporary cities should exercise



## 02 Smart Cities Index in existing studies

### Concepts and Definitions of Smart City

Institution	Concept / Definitions
ITU & UNECE	A smart sustainable city is an innovation city that uses ICTs and other means to improve quality of life, the efficiency of urban operation and services, and competitiveness while ensuring that it meets the needs of present and future generations concerning economic, social, environment as well as cultural aspects
OECD	Initiatives or approaches that effectively leverage digitalization to boost citizen well-being and deliver more efficient, sustainable and inclusive urban services and environments as part of a collaborative, multi-stakeholder process
EU	A smart city is a place where traditional networks and services are made more efficient with the use of digital solutions for the benefit of its inhabitants and business
Smart Cities Council	A smart city gathers data from devices and sensors embedded in its roadways, power grids, buildings and other assets. It shares that data via a smart communications system that is typically a combination of wired and wireless. It then uses smart software to create valuable information and digitally enhanced services

## 02 Smart Cities Index in existing studies

### Smart City Assessment Schemes/Indices

Assessment Framework / Tools	Main Assessment Criteria
IMD-SUTD Smart City Index	Infrastructure and technology evaluated over health and safety, mobility, activities, opportunities and governance
Global Cities Index	Business, Human Capital, Information Exchange, Cultural Experience, Political Engagement
United 4 Smart Sustainable Cities KPIs	SDGs (especially SDG 11)
What Works Cities	Data-driven governance
Global Power City Index	Multiple dimension
Smart City Government	Smart City Governance and readiness
Innovation Cities Index	Emphasis on innovation economy
Juniper Research Smart City Frameworks	Smart Solutions related to mobility, healthcare, public safety, productivity
Cities in Motion Index	Multiple dimensions
EasyPark	Emphasis on mobility
Austrian Digital Cities Index	Draws on European Digital Cities Index
Smart Cities Council's tools and frameworks	Multiple dimensions of smartness
Smart Cities Index-India	Multiple Dimension
CityKeys	Multiple Dimension
European Digital Cities Index	Digital Entrepreneurship

## 02 Smart Cities Index in existing studies

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### How unique is the WeGO Smart Cities Index 2022 if compared to other existing indices?

#### 1) To enhance the comprehensiveness

- The lack of harmonized and comparable framework to measure the extent to which digital innovation in cities is delivering better multi-sectoral outcomes for residents
- Suggestion the building of a framework that can assess “how digital innovation affects cities and urban policies” therefore offering policy solutions to overcome various urban challenges.

#### 2) To align such a comprehensive framework to a country of a city's strategies while providing a time-variant effect of smart cities on society

#### 3) To create flexibility and adaptability for different circumstances

The report shares an example of Bristol, UK, with around 150 key performance indicators to measure and release, apart from the potential smarty city measurement framework

# Smart Cities Index in existing studies

## Key Considerations of ESG

Environmental	Social	Governance
Climate Change	Labor Management	Financial Transparency
Pollution and Waste	Equal Access/Opportunity	Board Diversity
Natural Resources	Product Safety	Business Ethics

Source: CAIA Association (2022) Systemic Impact and ESG Investing in Smart Cities. p.4.

### Background

- ESG criteria create a framework for helping investors who want to incorporate personal values into their investment approach
- the millennial generation could put between \$15 trillion and \$30 trillion into US-based ESG investments
- SCI studies paid little attention to the necessity to use the ESG frameworks as the assessment tools for Smart City implementation evaluation



# Main Findings of the WeGO SCI

## Integrated ESG Indicator Assessment Models of Smart Cities

Dimension	Indicator	Description
Environmental Performance	Green Technologies	<ol style="list-style-type: none"> <li>1. Number of LEED or BREAM sustainability-certified buildings in the city</li> <li>2. Percentage of commercial and industrial buildings with smart meters or automation system</li> <li>3. Percentage of electronic and hybrid cars</li> </ol>
	Resources and Energies	<ol style="list-style-type: none"> <li>1. Percentage of total energy derived from renewable sources</li> <li>2. Greenhouse gas emission measured in tons per capita</li> <li>3. Percentage of city's solid waste that is recycled</li> </ol>
	Managerial Efforts	<ol style="list-style-type: none"> <li>1. Availability of climate resilience planning</li> <li>2. Green space per capita (Green area per 100,000)</li> <li>3. Environment Acquisitions, Environmental Investment</li> <li>4. Average seed environment investment</li> <li>5. Local government spending on ICT-based environmental education as percentage of total education spending</li> </ol>
Social Performance	Human Rights	<ol style="list-style-type: none"> <li>1. Availability of any initiatives to educate citizens on career development, education, or skills.</li> <li>2. Availability of laws and policies to protect about digital privacy</li> </ol>
	Workforce Opportunity	<ol style="list-style-type: none"> <li>1. Availability of digital platforms or programs to access employment, education and training programs</li> <li>2. Availability of financial support to access employment, education and training programs, and support services in ICT sector</li> </ol>
	Social Inclusion & Responsibility	<ol style="list-style-type: none"> <li>1. Availability of programs to participate in social activities, volunteering, and charitable giving</li> <li>2. Proportion of schools with access to the internet for pedagogical purposes</li> <li>3. Fixed-broadband subscriptions per 100 inhabitants</li> </ol>
	Quality of Life	<ol style="list-style-type: none"> <li>1. Availability of ICT infrastructure to solve social problems</li> <li>2. Availability of telework or friendly-work environment system</li> </ol>
	Health & Safety	<ol style="list-style-type: none"> <li>1. Availability of community policing polices related to digital security</li> <li>2. The rate of law enforcement officers who work on digital crime (including cyber-enabled fraud and data theft)</li> <li>3. Availability of integrated disaster/emergency management system</li> <li>4. The rate of the use of telehealth access to primary physician/general practitioner services</li> </ol>
Governance Performance	Administrative/ Legal Governance	<ol style="list-style-type: none"> <li>1. Availability of administrative services and process of AI</li> <li>2. Availability of integrated digital operation platform for administrative system</li> <li>3. Availability internal audit manual of ICT management</li> <li>4. Number of ordinances related to ICT management</li> </ol>
	Organizational/ Human Governance	<ol style="list-style-type: none"> <li>1. Availability of ICT system in the hiring process</li> <li>2. Number of NPOs related to ICT in city</li> <li>3. Availability of institutionalized digital ethics guideline</li> <li>4. Availability of ICT-based collective intelligence platforms</li> </ol>
	Economic/ Financial Governance	<ol style="list-style-type: none"> <li>1. Ratio of ICT-related small and medium business to total businesses</li> <li>2. Local government spending on ICT sectors as percentage of total government expenditure</li> <li>3. Local government spending on R&amp;D as percentage of total government expenditure</li> <li>4. Number of startups from ICT related sectors in a city</li> </ol>

# 03 Main Findings of the WeGO SCI

## Environment Performance of the new SCI

		1	2	3	4	5	6	7	8	9	10	11
		Green Technologies			Resources & Energies			Managerial Efforts				
Middle East	A	M	H	M	M	H	M	H	H	H	H	H
Asia-Pacific	B	M	L	L	L	M	M	H	L	H	H	L
	C	M	H	L	H	L	L	L	H	L	L	H
	D	L	M	M	H	M	M	H	L	H	H	L
	E	L	L	L	L	H	H	H	M	H	H	L
	F	H	H	H	H	H	H	H	H	H	H	H
	G	M	M	L	H	H	H	H	M	H	H	M
	H	L	L	H	L	L	L	H	M	H	H	L
	I	M	H	M	H	H	H	H	L	H	H	L
	Eastern Europe	J	L	L	L	L	L	M	L	M	H	H
K		M	H	M	H	M	H	H	L	H	H	H
Americas	L	L	L	L	H	L	M	H	M	H	H	L
	M	L	L	H	H	M	L	H	L	H	H	L

## Environment

- The green technologies of environment performance in the new SCI is weak and it could say that member cities should work hard on increasing the level of this dimension of environmental performance.
- The resources and energies (R&E) pillar have 46% of high, which means that the performance of R&E is better than green technologies. In other words, still the level of utilization on green technologies needs to be investigated more than the others.
- Per managerial efforts of environment performance is a little bit brighter (52% is high levels).
- three pillars of environment performance indicators are still lower level among member cities but are relevant to SCI and SCA as solid measures.

# Main Findings of the WeGO SCI

## Social Performance of the new SCI

		12	13	14	15	16	17	18	19	20	21	22	23	24
		Human Rights		Workforce Opportunity		Social Inclusion & Responsibility		Quality of Life		Health & Safety				
Middle East	A	H	H	H	H	H	H	L	H	L	H	L	H	H
Asia-Pacific	B	H	H	H	H	H	H	L	H	H	H	L	H	H
	C	L	L	L	L	L	M	M	L	L	L	L	L	L
	D	H	H	H	L	H	L	L	H	H	H	H	L	H
	E	H	H	H	H	L	L	H	L	L	L	M	H	H
	F	H	H	H	H	H	H	M	H	H	H	H	H	H
	G	H	H	H	H	H	H	H	H	L	H	M	H	H
	H	H	H	H	H	H	H	L	H	H	L	L	L	L
	I	H	H	L	H	H	H	H	H	H	H	H	H	H
	Eastern Europe	J	L	L	L	L	L	L	L	L	L	L	L	L
K		H	H	H	H	H	H	M	H	H	H	H	H	H
Americas	L	L	L	L	L	H	M	M	L	H	L	H	H	H
	M	H	H	H	H	H	H	M	H	H	H	L	H	H

### Social Performance

- Human right (H=76%) and workforce opportunity (H=69%) is well provided and managed in their smart cities
- Quality of life, health & safety, and social inclusion & responsibility have 65%, 61% and 53% respectively
- All sub-contents are over 50% so that it is much lighter than the other two performances
- All sub-contents are over 50% so that it is much lighter than the other two performances

# 03 Key Findings of the WeGO SCI

## Governance Performance of the new SCI

		25	26	27	28	29	30	31	32	33	34	35	36
		Administrative & Legal Governance				Organizational & Human Governance				Economic & Human Governance			
Middle East	A	L	H	H	H	H	M	L	H	M	M	M	M
Asia-Pacific	B	H	H	H	H	H	L	H	H	L	H	L	L
	C	M	H	H	L	H	M	L	L	M	H	M	L
	D	H	H	H	L	L	M	H	L	H	H	L	M
	E	H	L	H	L	H	L	L	L	L	L	M	L
	F	H	H	H	H	H	H	H	H	H	H	H	H
	G	H	H	H	H	H	M	H	L	M	M	M	M
	H	L	H	L	L	H	L	L	L	L	M	L	L
	I	M	H	H	H	H	M	H	H	M	L	M	H
	Eastern Europe	J	L	L	L	L	L	L	L	L	L	L	L
K		L	H	H	M	H	L	H	L	M	H	M	H
Americas	L	L	L	L	L	L	L	L	L	M	L	L	L
	M	L	H	H	H	H	L	H	L	L	H	L	L

## Governance Performance

- The administrative and legal governance performance is better than the other two (H=52%).
- The economic and human governance is the weak area (H=23%).
- Organizational and Human governance is 44% thus it is less than 50% so that it should be increased if the member cities would like to increase their capability of governance to develop the more inclusive and sustainable smart city.
- Therefore, these measures also are well fitted in and could be included in the new SCI.



# 04 Benefits of Main Findings

## Benefits of Main Findings

### Environmental Performance

- Suggesting actions related to emission reduction processes or policies aiming at reducing **the environmental impact of our daily life**
- Helping to consider fossil fuel divestment policies, resource efficiency actions, such as in the case of water or energies

### Social Performance

- Emphasizing of more comprehensive roles of a city that promotes **social inclusion and social responsibility** for governments, citizens, and businesses in the ICT-based environment
- Measuring whether a city has implemented any ICT-based initiatives to ensure the protection of the rights of all citizens and whether a city has implemented any ICT-based workforce system, ICT infrastructure and digital platform of interconnected communities to ensure that citizens and all levels of stakeholders

### Governance Performance

- Being capable of including a variety of indicators and indicate the **management and administrative rules** or procedures for countries, corporations, and public agencies
- Being able to indicate the capacity to solve urban problems with collective intelligence and realize and expand public values, as well as to establish the city's vision and development strategies

# 05 Expected Effects & Implications

## How to move forward from the WeGO Smart Cities Index 2022

### How to move forward (Implications)

- The new goals and direction of smart cities should be **citizen-centric, environmentally friendly** and focused on **democratic governance**.
- All the indicators should be managed in terms of **change management** because of their speed of changing nature and globally connected diffusion of rapid digital transformation.
- The new SCI system should be assessed openly and in **participatory ways**
- **Capacity-building and knowledge** sharing efforts should be conceived of as a crucial, multi-step process for creating the better outcome of smart city initiatives towards the next generation.

# Thank You

Q&A

