

Tokyo Development Learning Center





The 9th Asia Smart City Conference Preliminary Report

The Asia Smart City Conference (hereinafter referred to as "ASCC") is an international conference that brings together representatives from Asian cities, national governments, international organizations, academic institutions, and private companies, with the aim of discussing the realization of a sustainable city where economic growth and a favorable urban environment are compatible. At this conference, representatives from cities will share their vision for growth as well as their current challenges and needs; private companies and academic institutions will propose innovative solutions; international organizations will offer programs to support efforts by cities and private companies; and various best practices from around the world will be shared. Furthermore, we offer an occasion for participants to find new business opportunities. The City of Yokohama has declared its intention to decarbonize by 2050 and is working with a variety of stakeholders to develop various initiatives.

Due to the impact of COVID-19, the 9th ASCC was held in an online format for the first time using a digital platform. With "Building smart cities aiming for carbon neutrality through city to city collaboration under the influence of COVID-19" as its main theme, the conference aimed to enhance its role as a hub for information on smart city development in Asia, and to generate more business opportunities for the creation of economically, socially, and environmentally sustainable cities.

The main event, held on January 18, 2021, provided a forum for online communication between various companies as well as companies and foreign cities. The main event featured five thematic sessions on energy, waste management, wastewater treatment, disaster risk reduction, and smart cities, as well as sessions organized by the Asian Development Bank Institute (ADBI) and the World Bank Tokyo Learning Center (TDLC), the Yokohama Youth Event by Yokohama City University students, and other sessions on a variety of topics. At the closing session, the "Yokohama Declaration" was presented as the outcome of the 9th ASCC.

On the following day, the "All Japan Summit for the Realization of a Japan-style Digital Society" organized by the Smart City Institute was held online as a continuous event of the 9th ASCC, and the City of Yokohama shared the contents of the 9th ASCC. The "Yokohama Declaration" will also be distributed at international conferences such as COP.

This year, the Asia Smart City Alliance (ASCA) is promoting the distribution of information and exchange of opinions on sustainable urban development on its LinkedIn and Facebook pages. In addition to promoting the urban solutions of Yokohama-related companies on a dedicated page for the Y-PORT project set up within Digima, an online platform for supporting companies expanding overseas, Slack will be used to promote mutual understanding and networking among participants to facilitate business matching after the main event and provide a place for continued interaction.

A total of approximately 1,250 people participated in the 9th ASCC main event.

About the 9th Asia Smart City Conference

| Date and Time | Monday, January 18, 2021, 10:00-18:00 (JST) |
|--------------------------------|--|
| Organizer | City of Yokohama |
| Co-organizers | Asian Development Bank Institute (ADBI), World Bank Tokyo Development Learning Center (TDLC) |
| Supporters | CITYNET, Institute for Global Environmental Strategies (IGES), Japan International Cooperation Agency (JICA), Japanese Government (Cabinet Office, MOFA, MOF, MLIT, MOE), Yokohama City University, Smart City Institute Japan |
| Conference Style | Online |
| Overall Theme | Building smart cities aiming for carbon neutrality through city to city collaboration under the influence of COVID-19 |
| Number of Participants | Approximately 1,250 participants |
| Number of Countries | 42 countries, 1 region |
| Participating Organizations | Approximately 750 organizations (Please refer Table 2 on page 4) |

Schedule

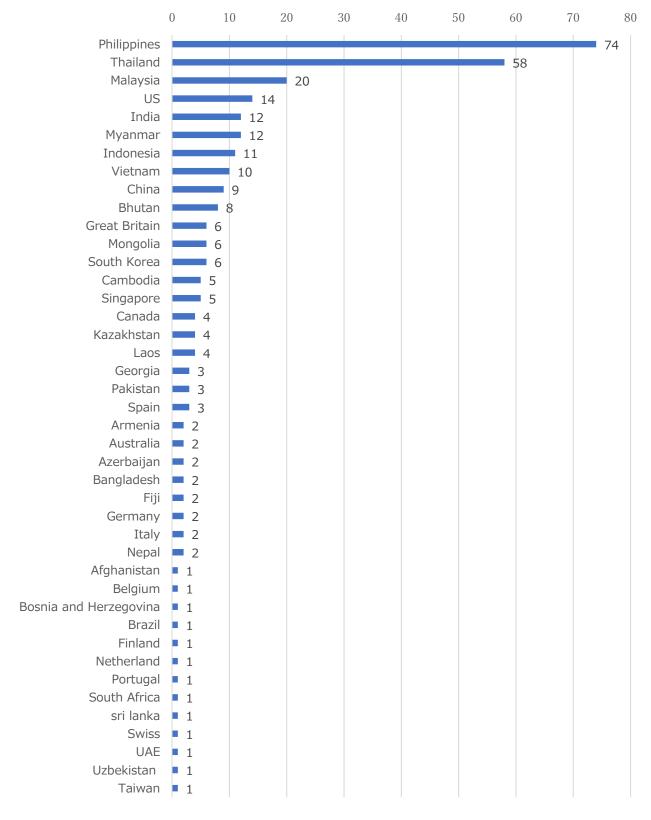
| The 9th ASCC Main Event on January 18th, 2021 "Building smart cities aiming for carbon neutrality through city to city collaboration under the influence of COVID-19" | | | | |
|---|--|---|-------------------------------------|----------------------------------|
| Schedule (JST) | Venue A (EN/JP Interpretation is available) | Venue B (EN/JP Interpretation is available) | Business Matching (English only) | Business Pitch (English only) |
| 10:00 - 10:05 | Introduction | | | |
| 10:05 - 10:50 | Yokohama Youth Event | | | |
| 10:55 - 11:40 | [Thematic Session] Energy Management | | | |
| 11:40 - 12:40 | Recess | | | |
| 12:40 - 13:00 | Message from Mayor of the City of Yokohama and Keynote Speech | | | |
| 13:05 - 13:50 | ADB and ADBI Session [Thematic Session] Solid Waste Management | | Always on throughout the event | |
| 13:55 - 14:40 | World Bank Session [Thematic Session] Resilience (DRR) | | | |
| 14:45 - 16:15 | | 14:45 - 15:30 [Thematic Session] Wastewater Treatment | | |
| | [Thematic Session] Smart City | 15:35 - 16:20 Climate Change Measures Session | | |
| 16:20 - 16:50 | Recess | | | |
| 16:50 - 17:50 | Closing Session | | | |



Analysis of the Main Event of the 9th Asia Smart Cities Conference

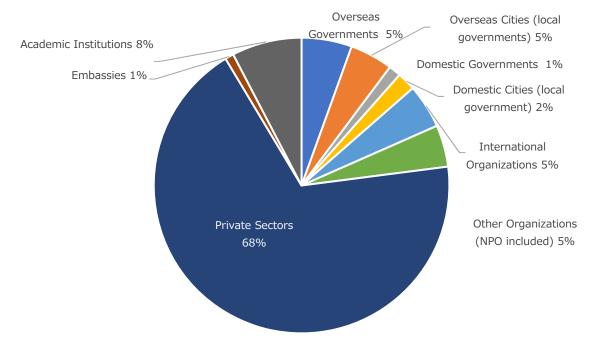
Participants

Table 1 - Overseas (by country)



(Unit: user)

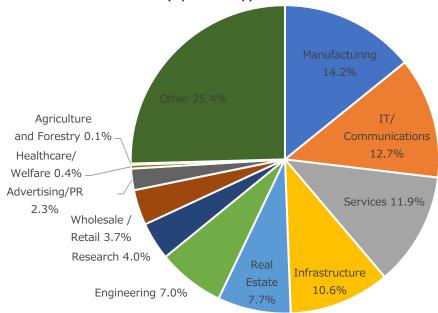
Table 2 - Institutions (by type)



| Private Sector | 510 | Other Organizations (NPOs included) | 34 |
|-------------------------------------|-----|-------------------------------------|-----|
| Academic Institutions | 57 | Japanese Cities (local governments) | 15 |
| Overseas Governments | 41 | Japanese Government | 10 |
| International Organizations | 36 | Embassies | 7 |
| Overseas Cities (local governments) | 35 | Total | 745 |

(Unit: organization)

Table 3 - Private Sector (by industry)



Breakdown:

| Manufacturing | 107 | Research | 30 |
|-------------------|-----|------------------|----|
| IT/Communications | 96 | Wholesale/Retail | 28 |
| Services | 90 | Advertising/PR | 17 |

| | | Total | 755 |
|----------------|----|--------------------------|-----|
| Engineering | 53 | Other | 192 |
| Real Estate | 58 | Agriculture and Forestry | 1 |
| Infrastructure | 80 | Healthcare/Welfare | 3 |

(Unit: people)

Business Matching

•Number of total business matches: 103

Breakdown: Video Meetings: 23, Direct Messages: 80

| 10:00-10:05 |
|-------------|
|-------------|

In the introduction, AKAOKA Ken, Director General of the City of Yokohama International Affairs Bureau, explained the purpose and expected impact of this ASCC.

Speaker:

AKAOKA Ken, Director General, International Affairs Bureau, City of Yokohama



| 10:05-10:50 | Yokohama Youth Event |
|-------------|---|
| | The Role of Boundary Spanners in Creating the Future of Asia in |
| | the Post-COVID-19 Era |

Organizer: Yokohama City University

To foster the next generation, Yokohama City University students gave a presentation on the theme of "The Role of Boundary Spanners" and had discussions with moderators and guest experts.

Speakers:

<Opening remarks>

Professor NAKAJO Yusuke, Vice President, Yokohama City University

Mr. HONDA Jun, Deputy General Manager, Human Resources Department, Nissin Corporation <Moderator>

Mr. HIRATA Kendra, Director, CITYNET Yokohama Project Office

<Presenters> (Supervisor: Dr. ASHIZAWA Michiko, Associate Professor, School of Economics and Business Administration, Yokohama City University)

Mr. CHOI Minhyuck, 4th Year Student, International College of Arts and Sciences, Yokohama City University

Ms. SHIMOGO Run, 4th Year Student, International College of Arts and Sciences, Yokohama City University

Ms. KADO Ayumi, 4th Year Student, International College of Arts and Sciences, Yokohama City University

<Guest Professional>

Mr. SAITO Norio, Director of Urban Development and Water Division (SAUW),

South Asia Department, Asian Development Bank



| 10:55-11:40 | [Thematic Session 1] Energy Management |
|-------------|--|
| | Carbon Neutrality - Energy Management for Cities |

Technological advances in the field of renewable energy have led to the introduction of decentralized energy supply systems. With presenters from JICA projects in Danang, Vietnam and Fiji, we discussed issues and measures related to the introduction of renewable energy in cities and independent decentralized supply in isolated areas such as remote islands.

Speakers:

<Moderator>

Mr. NAGUMO Takehiko, Executive Director, Smart City Institute Japan

<Speakers>

Ms. Nguyen Thi Thuy Mai, Vice Director, Department of Industrial and Trade (DOIT), Da Nang City, Vietnam

Mr. OGAWA Tadayuki, Senior Advisor, Japan International Cooperation Agency <Commentators>

Mr. KUROMIZU Kimihiro, JICA Expert from City of Yokohama, Metropolitan of Bangkok Authority, Thailand

Mr. KATO Makoto, Board of Directors/General Manager, Project Development Department, Overseas Environmental Corporation Center, Japan

<Reactor>

Mr. SUGIMOTO Satoshi, Y-PORT Center Expert



| 12:40-13:00 | Greetings and Keynote Speech |
|-------------|------------------------------|
| | , . |

Keynote speeches by the organizers and related organizations.

Speakers:

Mr. KOIZUMI Shinjiro, Minister of the Environment, Japan

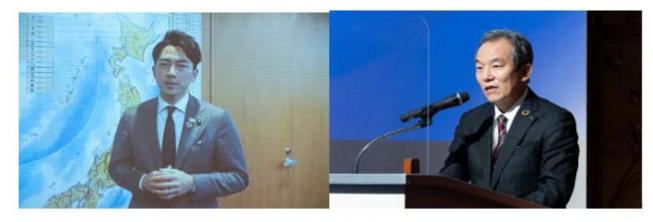
HAYASHI Takumi, Deputy Mayor of Yokohama City

Mr. Robert Guild, Chief Sector Officer, Sustainable Development and Climate Change,

Asian Development Bank

Mr. Sameh Wahba, Global Director, Urban, Disaster Risk Management,

Resilience and Land Global Practice, World Bank





| 13:05-13:50 | ADB/ADBI Session |
|-------------|--|
| | Build Back Better for Post-Pandemic Livable Cities |

Organizer: Asian Development Bank (ADB) · Asian Development bank Institute (ADBI)

The Asian Development Bank (ADB) has prepared a guidance note "Livable Cities: The Post-COVID-19 New Normal" to provide cross-sector guidance for cities to aim for better recovery and revitalization from the COVID-19 crisis. We discussed how this new normal framework can be incorporated into the creation of more livable cities after COVID-19, and what good practices are being implemented.

Speakers:

<Moderator>

Mr. Hong Soo Lee, Senior Urban Specialist (Smart Cities), Asian Development Bank <Speakers>

Mr. Stefan Rau, Senior Urban Development Specialist, Asian Development Bank

Mr. KIKUCHI Koji, Senior Manager Cross-Industry Business Development Division, NEC Corporation

Ms. Ramola Naik Singru, Senior Urban Development Specialist, Asian Development Bank Hon. David F. Tumulak, Cebu City Councilor



| 13:05-13:50 | [Thematic Session 2] Solid Waste Management | |
|-------------|--|--|
| | Addressing changes in solid waste characteristics under COVID- | |
| | 19 through proper disposal approaches | |

With rapid population growth in emerging cities, waste collection, treatment, and disposal have become a significant administrative cost for local governments. In addition, while the volume of waste is rapidly increasing due to COVID-19, safe and efficient collection and proper disposal routes for this waste have not yet been established. We discussed new issues and countermeasures using Mandaue City in the Philippines as an example.

Speakers:

<Moderator>

Dr. Premakumara Jagath Dickella Gamaralalage, Deputy Director, The IGES Centre Collaborating with UNEP on Environmental Technologies (IGES/CCET)

<Presenters>

Ar. Araceli G. Barlam, Head of Mandaue City Environment Natural Resource Office, Philippines

Ar. Marlo D. Ocleasa, Head of City Planning and Development Office, Philippines

<Commentator>

Mr. OHNO Masato, Chairman, EX Research Institute Ltd.

<Reactor>

Mr. OKAMOTO Shinsuke, Y-PORT Center Expert



| 13:55-14:40 | World Bank Session |
|-------------|---|
| | Pathways to Sustainable Urban Development |

Organizer: World Bank Tokyo Development Learning Center (TDLC)

Two cases in Indonesia and Bangladesh supported by the World Bank's initiative to deploy cost-effective smart solutions for sustainable cities, the Global Smart Cities Partnership Program (GSCP), were introduced, and examples of the application of Japanese best practices in emerging countries and using technologies that contribute to the reduction of CO2 emissions were presented.

Speakers:

<Moderator>

Mr. Victor Mulas, Senior Urban Specialist and TDLC Team Lead, World Bank Tokyo Development Learning Center (TDLC)

<Panelists>

Ms. Mansha Chen, Urban Specialist, World Bank

Ms. Gayatri Singh, Senior Urban Specialist, World Bank

HASHIMOTO Toru, Director General for Development Cooperation, International Affairs Bureau, City of Yokohama



| 13:55-14:40 | [Thematic Session 3] Resilience (Disaster Risk Reduction) |
|-------------|---|
| | Bridging DRR and COVID-19 with Technology |

While COVID-19 infections are spreading around the world, disasters such as typhoons and earthquakes are still occurring, and countries are working to create resilient cities. Without countermeasures against infectious diseases, disaster prevention and mitigation measures will not be possible, and true resilience will not be achieved. The key for this is to localize and translate the technology to fit the characteristics of the region. We discussed the need to provide technology at a price point that is affordable to cities with limited financial resources.

Speakers:

<Moderator>

Mr. HIRATA Kendra, Director, CITYNET Yokohama Project Office

<Panelists>

Mr. ABE Hiroshi, Specialist Smart Infrastructure Business Dept, MACNICA, Inc.

Mr. YOKOYAMA Takayoshi, DX Business Division Project Manager, JVCKENWOOD Corporation Hon. Jerry Trenãs, Mayor of Iloilo City, Philippines

Dr. Tariq Bin Yousuf, Superintending Engineer, Environment, Climate and Disaster Management Circle, Dhaka North City Corporation, Bangladesh

Mr. PDKA Wilson, Chief Fire Officer, Colombo City Council

Mr. Neo Cheng-Chi Cheng, Sub-division Chief of Disaster Prevention and Planning Division, Taipei City Fire Department



| 14:45-16:15 | [Thematic Session 4] Smart City |
|-------------|--|
| | ASEAN Smart City Concept and its Realization |

In ASEAN, a variety of plans are underway, mainly greenfield projects. AMATA, which is developing smart cities in Thailand, Vietnam, and other countries, introduced their vision and goals for the cities and their initiatives to achieve them. As a proposal from Japan and Yokohama, we discussed the realization of high-quality infrastructure development and the creation of a bustling city that is easy to live in.

Speakers:

<Moderator>

HASHIMOTO Toru, Director General for Development Cooperation, International Affairs Bureau, City of Yokohama

<Presenters>

Ms. Lena Ng, Chief Investment Officer, AMATA Corporation PCL

Mr. SUDO Osamu, Head of Marketing and Sales in Vietnam, Amata City Bien Hoa Joint Stock Company

Mr. YAMAGUCHI Yasuhiro, Advisor, YOKOHAMA URBAN SOLUTION ALLIANCE (YUSA)

Mr. TAKAHASHI Gen, General Manager, Global Business Development Division,

JFE Engineering Corporation

<Panelists>

Mr. ISHII Sho, Director for International Negotiations Management, International Policy Division Policy Bureau, Ministry of Land, Infrastructure, Transportation and Tourism (MLIT) of Japan

Mr. NAGUMO Takehiko, Executive Director, Smart City Institute Japan (SCI-Japan)

Ms. Lena Ng, Chief Investment Officer, AMATA Corporation PCL

Mr. YAMAGUCHI Yasuhiro, Advisor, YOKOHAMA URBAN SOLUTION ALLIANCE (YUSA)

Mr. TAKAHASHI Gen, General Manager, Global Business Development Division, JFE Engineering Corporation



| 14.45-15.50 | [Thematic Session 5] Sewage and Wastewater Treatment |
|-------------|--|
| | Proper and efficient wastewater treatment approaches |

It has been reaffirmed that proper sewage and wastewater treatment plays an important role in urban public health. With overseas presenters from Rajasthan, India, Metro Cebu, Philippines, and Vietnam, we discussed the challenges and solutions for building an integrated sewage and wastewater treatment system that appropriately combines decentralized and intensive treatment methods and discussed the need to customize and combine technologies to meet local needs. The participants discussed the need to customize and combine technologies to meet local needs.

Speakers:

<Facilitator>

Mr. SAITO Norio, Director, Urban Development and Water Division (SAUW), South Asia Department, Asian Development Bank

<Presenters>

Mr. Praveen Ankodia, Deputy Project Director (Technical) in Rajasthan Urban Infrastructure Development Project (RUIDP), Rajasthan Urban Drinking Water, Sewerage and Infrastructure Corporation Limited

Mr. Emmanuel C. Espina, Principal Engineer C, Corporate Planning Department, Metro Cebu Water District

Dr. Nguyen Tung Lam, Director of Center for Consultancy, Training and Services on Natural Resources and Environment, Institute for Strategy, Policy on Natural Resources and Environment

<Reactor>

Mr. KIKUHARA Junya, Y-PORT Center Expert



15:35–16:20 Climate Change Measures Session: Platform for Redesign 2020

The Japanese government has launched an online platform called "Platform for Redesign 2020" to promote collaboration among all actors to solve the two global issues of climate change and COVID-19. Based on the three transitions to "decarbonized society," "circular economy," and "decentralized society," this session focused on "cities" and shared knowledge through practical discussions on how to rebuild sustainable and resilient cities in the post-Corona era.

<Moderator>

Mr. UCHIDA Togo, Director, ICLEI Japan

<Presenters>

Mr. SUGIMOTO Ryuzo, Director, International Cooperation and Sustainable Infrastructure Office, Ministry of the Environment, Government of Japan

Mr. MIYAZAKI Akihiro, Deputy Director General, Global Environment Department, Japan International Cooperation Agency (JICA)

OKUNO Shuhei, Deputy Director-General, Climate Change Policy Headquarters, City of Yokohama

Mr. Risto Veivo, Climate Director, City of Turku, Finland



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The closing session summarized the results of the discussions on the theme of the 9th ASCC, "Building smart cities aiming for carbon neutrality through city to city collaboration under the influence of COVID-19." After the presentation of the results from the youth event, the Yokohama Declaration, which summarized the discussions that took place at ASCC, was presented at the end of the session.

<Speakers>

Ms. Laia Bonet, Deputy Mayor of Barcelona City Council (Agenda 2030, Digital Transition, Sports, Territorial and Metropolitan Coordination and International Relations)

Dr. ISHIHARA Yasuhiro, Deputy Minister for International Projects, Ministry of Land, Infrastructure, Transport and Tourism, Japan

Mr. Rushi Rama, Lead, G20 Global Smart Cities Alliance (GSCA)

Mr. Chul Ju Kim, Deputy Dean, Asian Development Bank institute (ADBI)

Mr. CHOI Minhyuck, 4th Year Student, International College of Arts and Sciences, Yokohama City University

HASHIMOTO Toru, Director General for Development Cooperation, International Affairs Bureau, City of Yokohama [Yokohama Declaration]



9th Asia Smart City Conference "Yokohama Declaration"

Building smart cities aiming for carbon neutrality through city to city collaboration under the influence of COVID-19

Cities should take the lead as we face a global paradigm shift, and the challenges and issues we face are going through a shift as well. Cities are in a position to work with citizens and the private sector to overcome this difficult situation while producing innovative and practical urban solutions and enhancing knowledge sharing through co-creation among cities. More than half of the world's population lives in cities today. As the percentage of people living in cities is expected to reach 80% by 2050, cities also need to recognize that they are a key contributor to climate change. According to the UN Environment Programme, cities are responsible for 75% of global CO2 emissions, with transportation and buildings among the largest contributors. During the ongoing pandemic, cities are recalibrating and exploring new ways to achieve sustainable development while addressing the challenges associated with COVID-19. It is essential to build a new modality and a new city. This was the universal voice of the 9th Asia Smart City Conference (ASCC).

This year, ASCC was organized in the context of a fundamental global paradigm shift. The conference was held with an expanded online format on a digital platform to attract a wider audience interested in smart cities in Asia and beyond. Based on the global challenges cities face, the main theme of the conference was "Building smart cities aiming for carbon neutrality through city to city collaboration under the influence of COVID-19."

During the conference, discussions were held on climate change, which can be attributed as a main cause of many recent global challenges. The entire world is being impacted by extreme weather conditions such as droughts, heat waves, heavy rain, floods, and landslides, and these phenomena become more frequent in Asian countries. In order to limit global warming to 1.5 degrees Celsius—the threshold suggested by the Intergovernmental Panel for Climate Change (IPCC)—achieving carbon neutrality by the mid-21st century is essential. Along with many leaders of the world Prime Minister Suga officially declared that Japan will go carbon neutral by 2050 in his policy speech on October 26th, 2020.

Many countries in Europe and some in Asia are increasingly integrating green growth policies and initiatives in response to COVID-19 and to recover from various global challenges that focus on protecting and regenerating the natural environment by reducing greenhouse gas emissions and promoting more comprehensive resilience policies along with digitalization. Carbon neutrality has become an essential step for cities as we need to combat climate change and COVID-19. In turn, this presents major opportunities for innovation and growth.

Based on this background, specialized sessions were organized by the Asian Development Bank (ADB) and the Asian Development Bank Institute (ADBI), the Tokyo Development Learning Center (TDLC) of the World Bank, and the City of Yokohama. The discussions highlighted topics related to integrated urban development, shared knowledge on innovative technologies, and explored directions for future initiatives. These conversations encouraged participants to recognize the importance of co-creation, city-led forward-looking initiatives, and adoption of new modalities and technologies. The following ideas emerged from the conference:

- 1. ASCC participants reaffirmed their commitment to international targets such as the Sustainable Development Goals (SDGs), the New Urban Agenda under HABITAT III, Sendai Framework for Disaster Risk Reduction, and the Paris Agreement under Conference of the Parties (COP21) to the UNFCCC. More cities have started to adopt carbon neutrality upfront as a fundamental city management policy. Cities should proactively engage citizens and private businesses by enabling platforms for participatory planning alongside public-private collaboration for innovative solutions that promote inclusiveness and an improved quality of life for livable cities. The Cities as a laboratory or "Urban Lab" approach should be considered to identify the changing dynamics of cities and the needs of their citizens.
- 2. Smart cities in Asia, especially those in emerging economies, still face fundamental urban challenges in providing clean water, disposing of wastewater and solid waste, supplying stable energy, and developing effective transportation systems. For cities, the COVID-19 pandemic has exposed existing faults such as poor physical infrastructure, unequal access to core urban services, inadequate delivery system, and suboptimal densities resulting in overcrowded cities. There is a recognizable need to revisit urban strategies and revise the urbanization process and practices to build back better, more livable cities after the pandemic. The importance of improving urban services and infrastructure and the effective use of technologies and digital solutions were discussed. Additionally, challenges such as lack of planning regarding initial and ongoing running costs of services, the shortage of capacity building opportunities in building sufficient workforce, and the digital divide among citizens were also discussed.
- 3. City management expertise has been treated as tacit knowledge, as each city has substantively different sets of geopolitical parameters. The conference emphasized the growing ICT capacity that makes "open" and "big" data more available to cities and the private sector. It was also recognized that the pace of change for cities to adopt smart solutions is quickening as cities have started to adopt low cost/high impact smart solutions and "leapfrog" technologies to address their most pressing urban development issues. These trends provide opportunities to establish business modalities such as CMaaS (City

Management as a Service). This approach makes elements of expertise in city management transferrable.

- 4. The conference recognized the power and potential of the private sector in achieving development goals to co-create sustainable cities and a circular economy. In emerging economies, the private sector has started to take leading roles in area-wide urban development and the introduction of innovative smart urban solutions. City leaders as well as relevant international institutions should provide platforms to facilitate collaboration and engage citizens through this new movement.
- 5. The importance of knowledge hubs such as the Y-PORT Center and other venues for mutual learning were discussed. We will continue to strengthen peer-to-peer learning through digital platforms such as the Asia Smart City Alliance (ASCA), pursue further city collaboration among our development partners, and utilize these opportunities as ideal venues to exchange ideas, experiences, and innovations and make them available to concerned parties.