















2nd International Forum on Low Carbon Cities

Incheon, Republic of Korea (Hybrid) 6-8 December 2022

REPORT OF THE FORUM

[Opening]

- 1. UNESCAP and Incheon Metropolitan City, in collaboration with Green Climate Fund, CityNet, Climate Change Center, ICLEI East Asia Secretariat, Incheon Institute, innovative Green Development Program and Local Government Association for Climate and Energy Transition, jointly organized the Second International Forum on Low Carbon Cities on 6-8 December 2022. Joined by about 150 on-site and 300 online participants, the Forum highlighted climate governance and roles/policies of cities, nature-based and innovative solutions, circular economy, green financing, citizen & stakeholder engagement for sustainable cities, and roles of regional cooperation.
- 2. The Forum was opened by Ms. Armida Salsiah Alisjahbana, Under-Secretary General of the United Nations and Executive Secretary of ESCAP, who highlighted that cities are critical for driving the global paradigm shift towards a low carbon, resilient, safe and sustainable future.
- 3. Following the opening speech, Mr. Yoo, Jeongbok, Mayor of Incheon Metropolitan City, Mr. Ban, Ki-moon, 8th Secretary General of the United Nations and Chairman of the Ban Ki-moon Foundation For a Better Future, Mr. Henry Gonzalez, Deputy Executive Director of Green Climate Fund, and Mr. Heo, Shick, Chairman of the Incheon Metropolitan Council delivered welcome and congratulatory remarks, recognizing key roles of cities in addressing global warming. They stressed that constructing dynamic partnerships between governments and cities, regions, businesses and investors is necessary to create timely solutions to combat climate crisis.
- 4. In the keynote speech, Ms. Yoo, Young Sook, Chairperson of Climate Change Center and Former Minister of Environment of the Republic of Korea emphasized the importance of shifting away from carbon-intensive societies by reducing each individual's carbon footprint. Public and private cooperation among various sectors was called for a more integrated, optimized, low-carbon

city.

- 5. In the following, Mr. Ganbold Baasanjav, Head of UNESCAP East and North-East Asia Office, gave a brief introduction of the Forum, including an overview of the objectives, which are to facilitate information exchange, promote engagement with partners and empower cities towards a low-carbon and resilient future.
- 6. The opening session was concluded with the announcement of Incheon's pledge to achieve carbon neutrality by 2045, a remarkable milestone in the journey towards low-carbon cities development, delivered by Mr. Yoo, Jeongbok, Mayor of Incheon Metropolitan City. He highlighted four policy directions for implementation: (1) a low-carbon, economic and ecological city, (2) customized climate action programmes for citizens, (3) strengthened global climate cooperation with international organizations and (4) a safe and resilient city against climate crisis.

[Session 1] Climate Governance and Roles/Policies of Cities

- 7. Moderated by Mr. Kim, Yong-Gun, Director General of Climate and Air Quality Research Group, Korea Environment Institute, the first session shared policies and programmes in support of national commitments to the Paris Agreement and local government's voluntary commitments, and discussed the roles of cities in climate governance.
- 8. Ms. Monique Nardi, Programme Officer, UNFCCC, emphasized the urgent need for multilevel and cooperative actions. She shared an overview of the Marrakech Partnership including a specific note on the Human Settlement Sector, outcomes of COP-27 with the Sharm el-Sheikh Implementation Plan, and subnational actions at COP-27, specifically the launch for the Presidency's Sustainable Urban Resilience for the next generation (SURGe).
- 9. Mr. Xu, Jun, Senior Engineer, Environmental and Ecology Bureau of Chongqing, China, shared a comprehensive overview of the progress in addressing climate change in Chongqing, including the promotion of carbon neutrality, the expansion of carbon markets and the inextricably-linked reduction of pollution and carbon emissions. He also introduced Chongqing's pilot projects to make Bishan and Tongnan Districts into climate-adaptive areas with sustainability initiatives. Through sustained industrial green transformation, continuous low-carbon optimization of energy structure, effective control of non-carbon dioxide greenhouse gases, and continuous growth of carbon sink capacity in natural spaces, Chongqing plans to promote low-carbon development.
- 10. This was followed by the presentation by Mr. Ganbold Tsog, Director of the

Capital City Air and Environmental Pollution Agency, Ulaanbaatar, Mongolia, on air pollution and policy activities. Sharing air quality policies and acts of Ulaanbaatar with the goal of air pollution reduction by 80% by 2024, he introduced accredited air quality monitoring, preventive activities against carbon monoxide poisoning, and air quality improvement zoning in Ulaanbaatar, Mongolia.

- 11. Ms. Junko Akagi, Research Manager, Kitakyushu Urban Centre of Institute for Global Environmental Strategies (IGES), presented climate governance, roles and policies of cities in Japan. She shared the Regional Decarbonization Roadmap in Japan which was formulated in June 2021 by the Council for National and Local Decarbonization, noting the increase in local governments' commitment to net zero carbon emission. She emphasized the importance of expanding renewable energy, improving climate adaptability and strengthening cooperation when developing strategies for regional decarbonization.
- 12. Mr. Son, Year-sun, Environmental and Climate Policy Division of Incheon Metropolitan City, Republic of Korea shared Incheon's effort to respond to climate change and the 2045 Carbon Neutrality Strategy. He highlighted that Incheon has implemented voluntary GHG reduction by industries, trainings for civil servants on carbon neutrality and support programmes for the vulnerable to climate change. He indicated that the newly announced Incheon Carbon Neutrality Strategy includes the basic carbon ordinance and coal-free policy.

[Session 2] Nature-based and Innovative Solutions

- 13. Moderated by Ms. Son, Bong-Hee, General Manager of ICLEI Korea Office, the session started with an introduction on ICLEI's urban biodiversity work and the application of different Nature-based Solutions (NbS). The session presented different dimensions of NbS in urban context, reflecting on the importance of stakeholder engagement, and integration of low-carbon, climate adaptation and resilience concepts. The session also elaborated applicable methods for communities, cities, countries and regions.
- 14. Mr. Suh, Seung Oh, Executive Director of Ramsar Regional Center East Asia, began his presentation with a question on why do NbS and wetland matter for the development of low carbon cities. Indicating the wetland's function as massive environmental buffers towards climate-related disasters and valuable carbon sink for low-carbon transformation, he introduced the Center's capacity building activities especially with Suncheon, Bandar Khamir and Changnyeong, as well as the Wetland City Accreditation scheme for awareness raising and development of management measures.
- 15. Mr. Zou, Tao, Director, Department of Sustainable City Planning, Beijing

Tsinghua Tongheng Urban Planning & Design Institute in China highlighted the importance of integration between ecological restoration and landscape design to scale up local and city action to regional impact. He introduced multiple caseworks focusing on how to balance the needs of human and animals to create habitat for both. He also shared the planning process which included suitable green and blue infrastructure for migrating species, recreational areas for residence, and green buildings for education purposes.

- 16. This was followed by the presentation by Ms. Tserendulam Shagdarsuren, Director General of the Climate Change Department at the Ministry of Environment and Tourism of Mongolia. She introduced the Nationally Determined Contribution (NDC) of Mongolia which includes a cluster of methods including legislations, developmental strategies and approaches corresponding to international agreements for the implementation period of 2021-2035. Indicating NbS strategies on, such as, forest biodiversity and water management are embedded in cross-departmental action plans, she shared a green city initiative to reconsider green areas as important measures towards effective climate actions and for systematic transformation towards low-carbon society.
- 17. Ms. Sun, Yanyan, Senior Engineer, Centre for Wetland Conservation of Dongying City, China, introduced Dongying's development vision with three pillars, namely, conservation of key ecological areas, delicacy management of natural resources, and valuation of ecological products. As an energy base with the second largest oil field in China, she explained that Dongying city has applied the master plan and specified conservation regulations focusing on all important nature reserves and coastal buffer zones. She also shared the use of ICT for environmental monitoring and effective ecological restoration projects.
- 18. Lastly, Ms. Maja Jovanovic from the Secretariat for Environmental Protection, City of Belgrade in Serbia, shared their hands-on experience through the Clever Cities project, which helps the city to accomplish the construction of a linear park and other green spaces, engaging the public and taking a variety of NbS measures. She also introduced the 'co-creation' process which consists of questionnaires, workshops and public discussions to create an inclusive atmosphere for the public to participate in the decision-making process.

[Session 3] Circular Economy and Cities

- 19. The Session 3 was moderated by Ms. Kim, Sohee, Secretary General, Climate Change Center, and discussed the roles of cities to sustainable and circular societies with representatives from cities and governments.
- 20. Ms. Elain Tan, Director of Centre for Liveable Cities, Singapore, briefed the Singapore's City-state circular economy long-term plan. She emphasized the

- importance of governance in developing circularity through policies and regulations at a city level.
- 21. Ms. Kang, Jinsook, Executive Director of Gwangmyeong Upcycle Art Center of the Republic of Korea, shared the concept and practices of building an upcycle city, and introduced the implementation plan on Gwangmyeong's Green New Deal and potential partnerships with relevant private sector companies. She also emphasized the importance of cultural activities related to circularity for citizen engagement as well as parenting.
- 22. Ms. Shi, Yi, Pudong Ecocycle Circular Economy Research Center, Shanghai, China, introduced the waste management policies and activities in China, which aim to reduce waste from the industrial complex, carbon emissions and water usage. She highlighted the importance of market mechanism such as the Pudong city's green rewards programme that offers mobile incentives for citizens. She also shared another Pudong city's programme that helped the refugees to get a job at the recycling center.
- 23. Finally, Mr. Boo, Gicheol, Director of Living Environment Division, Jeju City, Republic of Korea, touched upon their best practices of circular resources policies and programmes for citizen engagement, and shared the monetary incentives to better mobilize citizens in a practical and effective way. He also introduced the city's Clean House programme that hired the elderly and the vulnerable at the clean house and its impacts on job creation and local economic development.

[Session 4] Green financing

- 24. Moderated by Mr. Bapon Fakhruddin, Senior Specialist of Water Resources Management, Green Climate Fund (GCF), the session offered a unique occasion to strength the partnership between financial institutions and the subregion with focus on (a) establishing a common understanding of the gaps and available resources toward a low-carbon society among cities and city networks and (b) sharing information and successful cases from cities/projects to strengthening partnership and peer-learning. Mr. Amgad Elmahdi, Water Sector Lead, GCF, Mr. Alessio Giardino, Senior Water Specialist, Asian Development Bank (ADB), Mr. Kwon, Ogeuk, General Manager, K-Water, Mr. Kim, Do-Kyoon, General Manager, K-Water, and Mr. Byambasaikhan Bayanjargal, Vice Chairman, Business Council of Mongolia joined as panelists and discussants.
- 25. Sharing several innovations in data, project design and financing, panelists pointed out the importance of a well-designed, integrated data and management platform and its implementation, while the ownership of the platform and its operation as well as financing remain a challenge. A cross-

- domain interoperability framework and investment for small cities were strongly recommended as a solution.
- 26. Panelists also touched upon water production and distribution both through traditional water systems and desalinization and highlighted the potentials in the water sector to capture the full value of the biogas that can be generated from wastewater and fecal sludge. Renewable energy and energy-efficient solutions could be further enhanced towards low carbon cities by reducing the impact from energy emissions.
- 27. Emphasizing the need of good understanding of LCC practices and its benefits , panelists reiterated the roles of multilateral development banks (MDBs) and international financial institutions (IFIs) for such as (1) financing opportunities for urban projects which can de-risk investments and attract private investors,
 - (2) financial mechanisms that could leverage institutional change and linkages,
 - (3) institutional finance and donor coordination for efficiency and leverage, and
 - (4) private sector financing.

[Networking Session]

- 28. Moderated by Mr. Kim, SungEun, Economic Affairs Officer, ESCAP East and North-East Asia Office, the networking session invited representatives from Climate Change Center (CCC), Global Covenant of Mayors for Climate and Energy Asia (GCoM Asia), Green Climate Fund (GCF), ICLEI East Asia Secretariat, innovative Green Development Program (iGDP), CityNet, United Cities and Local Governments Asia Pacific (UCLG ASPAC), World Smart Sustainable Cities Organization (WeGO), and Local Government Association for Climate and Energy Transition. The session started with brief introduction of each organization with their ongoing and planned initiatives, followed by panel discussion.
- 29. The panels first shared their engagement with the youth. iGDP introduced a youth video contest for plastic use reduction and an art show for elementary schools that featured art made from trash. WeGO shared a small city champion's programme focused on knowledge of SDG concepts and smart cities for students worldwide. ICLEI presented its plan for a world congress, including a youth engagement session. GCoM Asia shared its programme to provide opportunities for students to work at GCoM. CCC explained its Climatus College programme, which includes a greenwashing explorers programme to investigate company's greenwashing efforts, and the school attack programme that surveys college waste management. Finally, GCF briefly shared about its internship programme.
- 30. Challenges each institution faced in promoting and achieving a low carbon city were also discussed. GCoM described difficulties in communication between

local and national government. CityNet mentioned that the bureaucracy of local government increases the probability of success, but also delays the process with procedural obligations. iGDP emphasized many city-officials' lack of knowledge about the climate framework and lack of data infrastructure. GCF highlighted the difficulty of coordinating with different agencies. WeGO emphasized the challenges of identifying the very specific characteristics and local needs to create customized plans for each individual city. UCLG ASPAC highlighted the need to bring all levels of governments together and facilitate their collaboration. ICLEI shared a case of some cities in China that struggled to implement climate action policies due to the restrictions to address the pandemic.

31. Last but not least, all organizations expressed the need for an annual forum that would help identify overlapping activities and seek collaborative opportunities toward a common goal. In addition, they called to expand this forum to maximize the impact.

[Session 5] Citizen & Stakeholder Engagement for Sustainable Cities

- 32. Moderated by Mr. Paulie Mora, Senior Program Officer at CityNet, the speakers joined the discussion to present on their best practices and share success factors for citizen engagement. Noting the path towards zero-carbon must be inclusive, this session highlighted the importance of inclusivity and leaving no one behind on the journey to zero-carbon cities.
- 33. The session began with a short survey of the audience's perspective on what they associated with citizen and stakeholder engagement, what the biggest challenges in including citizens and stakeholders are, and who the major stakeholders that need to be involved are. The audience most associated "inclusivity" with citizen and stakeholder engagement and answered that "funding" and "low awareness" tended to be the biggest obstacles in making projects more inclusive. The audience also largely agreed that the government and private sector were two of the major stakeholders that were essential to engage in order to successfully achieve low carbon cities.
- 34. The first speaker, Ms. Melissa Chin, Strategy and Analytics Manager at Think City, shared about the participatory process that Think City uses to engage stakeholders and citizens in its projects. She shared Think City's stakeholder mapping matrix which organizes stakeholders by level of influence vs. level of interest. Think City focuses on engaging the local community and including vulnerable groups in their work. She expressed how important it is that, as organizers, we do not evade the objectors, and noted that people must have the opportunity to have face-to-face interactions as a neutral ground for grievances and ideas to be expressed. Including as many voices as possible into urban projects contributes to long-term engagement and approval from the entire

community of citizens and stakeholders.

- 35. Mr. Dong-ryul Kang, Network Manager of SDSN Korea emphasized the importance of including youth, as the generation of the future, in achieving SDGs and developing a sustainable mindset from a young age to spur on change. In his work with youth, he shared about the concept of Y-SDGs, which were generated together with initiatives and ideas from youth leaders. His organization has also pioneered Voluntary Youth Reviews to assess the impact of youth organizations on achieving SDGs. By using a metaverse platform for forums and discussions and connecting with students through universities, they can engage youth in discussions on sustainable actions. Using inclusive methods for relevant stakeholders, SDSN Korea worked with the city of Dangjin in the ROK to successfully transition its power source from coal-fired plants to solar energy.
- 36. Finally, Ms. Andrea Villaroman, the Director of the Climate Change and Environmental Sustainability Department at Quezon City shared about the city's Trash to Cashback programme, which incentivizes citizens to sort waste at the source and trade waste in for environmental points to redeem on groceries, deliveries, or bills. Through PPPs, the environmental points can be provided without additional cost to the government. The reward system and trading booths boost community engagement and assigns value to things previously just known as trash. The programme began as a response to the pandemic but grew into a part of daily life for many of the most vulnerable citizens in Quezon City.

[Session 6] Roles of Regional Cooperation

- 37. The last session discussed the roles of regional cooperation in achieving low-carbon societies and sought ways to synergize the work of city networks. Moderated by Mr. Cho, Kyeongdoo, Director general of Incheon Climate and Environment Research Center, four speakers were joined the session.
- 38. Ms. Madelaine Arlene Alfelor Gazmen, Ambassador, UCLG ASPAC, shared information and network of UCLG ASPAC, which coordinates and supports various partnerships in the region, including Asia-Pacific Local Government Coordinating Body (APLG), Asia-Pacific Mayors Academy, Integrated Urban Systems Partnership, and Penang Platform for Sustainable Urbanization. She emphasized that networking and regional cooperation are important in achieving low carbon societies as climate change has no administrative boundaries and affecting all sectors. She also shared the strategies of UCLG ASPAC to strengthen cities network in achieving low carbon societies.
- 39. Ms. Asih Budiati, team leader of GCoM Asia, shared the experiences of GCoM for climate and energy. She explained that GCoM has 13 regional/national

covenants of mayors established worldwide, and GCoM Asia has focused cooperation in South-East Asia for data and methodology for climate change mitigation and adaptation. She emphasized the importance of guidance and tools for climate action planning and implementation for effective climate actions at the city level.

- 40. Ms. Sanjee Singh, Economic Affairs Officer, Environment and Development Division of ESCAP, shared GHG emission trends and recommendations for advancing low carbon cities in Asia-Pacific. She explained that cities play a critical role in improving quality of life and accelerating the transition to renewable energy and net zero targets. To advance low carbon cities, she emphasized accelerating energy transition for transport and climate finance.
- 41. Finally, Alissa Raj, Deputy Regional Director for East, Southeast Asia & Oceania (ESEAO) of C40 Cities, introduced ESEAO regional cooperation. Sharing C40 leadership standards, she emphasized that C40's vision of climate action is rooted in equity and a green and just future for all.

[Closing]

42. Mr. Ganbold Baasanjav, Head, UNESCAP East and North-East Asia Office, highlighted the significance of the insightful presentations and discussions and expressed his sincere gratitude to Incheon Metropolitan City, partners as well as all the audience and participants for their active engagement. He also emphasized the need of a multistakeholder partnership for a cross-sectoral and cross-cutting approach to respond to the climate crisis.