

4th International Forum on Low Carbon Cities

Kitakyushu, Japan

8-9 October 2024

REPORT OF THE FORUM

EXECUTIVE SUMMARY

The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), the City of Kitakyushu, and Incheon Metropolitan City, in collaboration with the Institute for Global Environmental Strategies (IGES) and the Japan International Cooperation Agency (JICA) Kyushu Centre, jointly organized the Fourth International Forum on Low Carbon Cities from 8-9 October 2024. The forum was held for the first time in Japan, recognizing Kitakyushu's decarbonization efforts. Over 100 participants from 18 countries attended to share information and discuss challenges and solutions for achieving sustainable, low-carbon cities.

Focusing on the main theme, “Empowering Urban Resilience: Transformative Solutions for Sustainable Low-Carbon Cities”, the forum highlighted the critical role of cities in advancing sustainable and low-carbon urbanization. The forum featured a special lecture by Professor Yukari Takamura from the University of Tokyo, calling for systemic shifts in infrastructure, energy and urban planning, emphasizing that achieving the 1.5°C target of the Paris Agreement requires ambitious international cooperation. During the thematic sessions—policy and governance, innovations and technologies for green transformation, and means of implementation/partnerships for resilience—also showcased innovative approaches and technologies, emphasizing the importance of cross-sectoral and international collaboration in building resilient and sustainable urban systems.

The event concluded with a reaffirmation of local action and partnerships as essential to achieving a low-carbon and resilient society. Outcomes from the forum will contribute to future discussions, including the 81st ESCAP Commission Session in 2025, as cities continue to implement innovative solutions for sustainable urbanization in the region.

OPENING SESSION

1. The forum was opened with opening remarks by Mr. Cheol Soo Kim, Director General of the Environment Bureau, Incheon Metropolitan City, Republic of Korea and Mr. Hirohito Toda, Deputy Executive Secretary for Partnerships and Coordination at ESCAP, who both emphasized the vital role of the cities in leading the global transition towards a low-carbon, resilient and sustainable future.
2. Following the opening remarks, Mr. Masaru Horikami, Deputy Director-General of Global Environment Bureau, Ministry of Environment, Government of Japan and Mr. Ko Goto, Director General of JICA Kyushu Center, delivered welcome and congratulatory remarks, stressing cities' key roles in tackling climate change.
3. Mr. Ganbold Baasanjav, Head of ESCAP East and Northeast Asia Office, gave a brief introduction of the forum, including an overview of the objectives, which are to facilitate knowledge exchange, bolster partnerships, highlight unique solutions and strengthen regional

dialogue.

4. The opening session concluded with a special lecture from Ms. Yukari Takamura, Professor at the Institute for Future Initiatives, University of Tokyo, emphasizing the main theme “*Empowering Urban Resilience: Transformative Solutions for Sustainable Low-Carbon Cities*”. During the lecture, she emphasized the role of urban systems in achieving deep emissions reduction and advancing climate resilient development, highlighting the need for equity, climate justice and inclusion in the transition process. The presentation also highlighted the necessity of international cooperation to meet the 1.5°C target of the Paris Agreement and synergies and co-benefits, such as economic growth and social equity, resulting from integrated climate and sustainability efforts. Key potential areas for cooperation included fostering collaboration among government, private sectors, and civil society; integrating long-term climate considerations into decision-making; protecting the most vulnerable communities; and sharing best practices and lessons learnt through inter-city cooperation.

SESSION 1: POLICY & GOVERNANCE: CO-BENEFIT & SYNERGISTIC APPROACHES FOR RESILIENT AND SUSTAINABLE URBANIZATION

5. Moderated by Mr. Togo Uchida, Executive Director of ICLEI Japan, the session focused on identifying and promoting co-benefit and synergistic approaches, highlighting how policies and action plans integrating decarbonization efforts can generate additional positive outcomes, thereby fostering a more holistic approach to urban sustainability.
6. Ms. Xindi Li, Project Lead for Energy Transition at the Institute for Global Decarbonization Progress (iGDP), outlined China’s climate and energy policy framework and explained how iGDP’s Low-carbon & Green Index for Cities (LOGIC) tracks low-carbon transition across various sectors and regions. According to the index, the top 10 policies contributing to the greenhouse gas (GHG) emissions abatement included the clean electricity standard, industrial electrification and hydrogen, among others.
7. Ms. Andrea Villaroman, Head of Climate Change and Environmental Sustainability Department at Quezon City, Philippines, presented the city’s Enhanced Local Climate Change Action Plan 2021-2050 (Enhanced LCCAP), along with their policies’ key accomplishments in climate change mitigation, adaptation, renewable energy & energy efficiency, sustainable transportation & green space development, plastic ordinances, circular economy, water conservation, legislations efforts and partnerships.
8. Mr. Jianbin Chen, Engineer at the Chengdu Institute of Planning and Design, China, provided a comprehensive overview of Chengdu’s progress in addressing climate change, focusing on the “Park City” concept – a sustainable urban development model increasingly adopted by the cities across China. He highlighted Chengdu’s initiatives like the creation of a circular ecological zone and Longquan Mountain Urban Forest Park, stressing that a green network could be established within the urban agglomeration through sustained regional cooperation.
9. Ms. Koddipili Arachchige Sajeewani Maheshika, Additional Secretary (Provincial Councils and Local Government) at the Ministry of Public Administration, Home Affairs, Provincial Councils and Local Government, Sri Lanka, introduced Sri Lanka’s National Physical Planning Policy & Plan 2050, which aims to reduce carbon emission and promote urban sustainability at the same time.
10. Mr. Junichi Sono, Executive Director of the Green Growth Promotion Department, City of Kitakyushu, Japan, highlighted Kitakyushu’s environmental achievements, which led to its recognition as a model environmental city nationally. He also presented the policy package

titled Kitakyushu Green Impact, which promotes decarbonization through three pillars: promotion of renewable energy, establishment of hydrogen supply and utilization hubs, and advancement of the circular economy.

11. During the open discussion, panelists emphasized that achieving synergistic approaches and co-benefits requires a grand design, clear goals, integrated strategies, and cross-department cooperation. They noted that trade-offs can be mitigated through gradual implementation, stakeholder engagement, and policy flexibility at the city level, with technology and scientific research playing vital roles. Ms. Andrea Villaroman additionally showcased Quezon City's success with the solarization project and phased plastic ban, illustrating how early stakeholder involvement and gradual transitions can help avoid trade-offs and foster policy acceptance.

SESSION 2: INNOVATIONS AND TECHNOLOGIES FOR GREEN TRANSFORMATION FOR RESILIENCE IN CITIES

12. Moderated by Mr. Shiko Hayashi, Programme Director of the Institute for Global Environmental Strategies (IGES), the session explored how innovations and technologies can facilitate green transformation and enhance resilience in urban areas. The discussion focused on cutting-edge advancements and practical solutions that contribute to sustainability and urban resilience, from local government, private companies to the representatives of the platform.
13. Ms. Minkyung Kang, a Research Fellow at the Incheon Institute, Republic of Korea, shared Incheon Metropolitan City's initiative aimed at green transformation and strengthening urban resilience. These efforts include the establishment of an integrated platform for a smart city that features IoT based traffic management, green infrastructure like central park and urban greening, AI-based disaster prediction, and circular economy systems.
14. Mr. Teruaki Murakami, COO of Chaintope, Inc., shared several blockchain-driven initiatives aimed at enhancing sustainability and transparency. The Digital Product Passport (DPP) ensures traceability by tracking products from raw materials to their final state, validating their environmental and social impact. The Chaintope Greeners initiative incentivizes eco-friendly actions by issuing tokens that reflect positive contributions, encouraging sustainable behavior. Both initiatives rely on Chaintope's Tapyrus blockchain technology to maintain transparency, traceability, and accountability throughout the process.
15. Mr. Hisanori Okazaki, Manager of the Zero Carbon Lifestyle Promotion Division in Yokohama, Japan, outlined the city's efforts toward green transformation and urban resilience. He first introduced the Carbon Neutral Port project in collaboration with TEPCO Power Grid and the startup Ocean Power Grid, aiming to transport wind-generated green electricity offshore using battery tankers, a novel approach to clean energy distribution. He also highlighted that Yokohama is strengthening collaborations with other local governments to secure a stable supply of green energy from external regions, reflecting its commitment to urban resilience through technological innovation and environmental cooperation.
16. Mr. Jaime Paulo Mora, Deputy Director of Programs at CityNet, introduced a pilot project that involved developing a low carbon toolkit in collaboration with the Seoul Metropolitan Government and Cookman University. By utilizing Seoul's open data policy, the project aimed to assess carbon emissions across the city's districts. The team successfully classified 25 districts into three categories based on their carbon levels: low carbon, medium carbon, and high carbon. This initiative highlights the effectiveness of using open data to inform environmental policies and advance sustainability in urban planning.

17. Mr. Shigeru Murakami, Director of the Renewable Energy Promotion Division in Kitakyushu, Japan, emphasized the city's renewable energy policy, particularly following its designation as one of the Decarbonization Leading Areas (DLAs) in 2022. As part of this initiative, Kitakyushu introduced a third-party ownership model for photovoltaic (PV) systems and storage batteries, targeting the facilities suitable for solar panel installation, especially public facilities and recycling companies within the Kitakyushu Eco-town. Additionally, the construction of the Kitakyushu Hibikinada Offshore Wind Farm is underway, further advancing the city's commitment to renewable energy.
18. The following open discussion focused on strategies to promote collaborations with various stakeholders in terms of innovations and technologies for green transformation. Panelists acknowledged that the private sector faces challenges due to uncertainties about the business value of partnerships. The urban SDG knowledge platform was highlighted as a tool for sharing best practices and urban innovations, showcasing effective collaborations and local climate actions to inspire others and connect them with relevant authorities for replication. Kitakyushu's Environmental Bureau was presented as a key example of fostering public-private partnerships through a unique human resource exchange program, where staff from utilities and companies work within city departments. This approach promotes mutual understanding, aligning business and environmental goals to advance sustainable development.
19. The discussion continued by identifying strategies for cities to build strong brands that attract stakeholders to their initiatives. Yokohama offers an open platform where companies can present proposals and suggestions, fostering collaboration. Panelists emphasized the importance of branding cities around innovation, sustainability, and resilience. For example, Incheon Metropolitan City has focused on attracting innovators by establishing incubators that provide funding, mentorship, and essential financial support, underscoring the critical role of such resources in engaging stakeholders effectively.

SESSION 3: MEANS OF IMPLEMENTATION / PARTNERSHIPS FOR RESILIENCE IN CITIES

20. Moderated by Mr. Hirohito Toda, Deputy Executive Secretary for Partnerships and Coordination, ESCAP, the last session explored the various means of implementation and the importance of partnerships, focusing on collaborative efforts, resources, and institutional mechanisms that can drive urban resilience.
21. Ms. Jiwon Choi, Director General of the Climate Change Center, shared how Korea is enhancing urban resilience through multi-stakeholder collaborations. She highlighted partnerships between local governments and civil society, such as Suwon's "Neighbor Sharing Box," which promotes resource circulation, and Gwangmyeong's "1.5 Degree Climate Neutral Citizens Group," where residents help design climate-neutral policies. She also discussed public-private partnerships, including solar pensions, flood alerts with Kakao and T-Map, and corporate engagement in carbon offset forestry. Finally, she emphasized the importance of youth leadership in policymaking, showcasing youth-led innovation projects.
22. Mr. Junki Morita from Amita Holdings Corporation's Overseas Business Management Group outlined the company's efforts to promote a low-carbon society through circular economy. He highlighted two key initiatives: first, tailored recycling based on clients' specific needs, where waste is collected and recycled accordingly. The second initiative, MEGURU STATION®, focuses on community building by encouraging communication among residents through resource separation.
23. Mr. Ronald Tirta Mulya, a planner of Development and Environment Division at Jakarta's

Regional Planning and Development Agency, shared the city's efforts under its Regional Low Carbon Development Plan (RPRKD) and the creation of a Climate Disaster Mitigation and Adaptation Working Team. He explained Jakarta's collaboration framework, which focuses on managing solid waste, tackling climate change, and improving air and water quality. While recognizing many innovative initiatives from communities and startups, he emphasized the need for an integrated platform to connect ideas, drive innovation, and coordinate efforts across stakeholders.

24. Mr. Ryodai Fujisawa from the Zero Carbon City Promotion Department in Takamatsu City, Japan, introduced the "DecoKatsu" initiative, which is promoted by the Ministry of the Environment to encourage decarbonized lifestyles within their community. This initiative includes activities such as reducing food waste, cost-sharing, and using low-carbon equipment. The city hosts training sessions and conferences for these leaders, who can be any resident, worker, or student in Takamatsu. This local initiative aims to connect with residents and encourages citizens, businesses, and organizations to support low-carbon activities while equipping leaders with the necessary knowledge to drive these efforts.
25. Mr. Nuon Samnavuth, Director of the Waste Management and Environment Division in Phnom Penh, Cambodia, outlined the city's efforts toward becoming a low-carbon city through its Sustainable City Plan for 2018-2030. This roadmap includes a new land use master plan approved by the Council of Ministers as well as collaboration with JICA to improve drainage infrastructure in the city center, addressing urban vulnerabilities. The plan also focuses on enhancing the transport, built environment, and manufacturing sectors.
26. Mr. Pham Le Thinh, Secretary of the Youth Union of the Sea and Islands Sub-Department in Hai Phong City, Vietnam, highlighted the city's partnerships with other cities and international organizations, including a sister city agreement with Kitakyushu. He shared that Kitakyushu's "Green Growth Promotion Plan" for Hai Phong covers various sectors, such as waste, energy, transportation, water, and the environment. Key projects include the U-BCF expansion, which strengthens water supply capacity, and the Trang Cat Waste Treatment Complex, which processes waste into compost fertilizer. He also emphasized Hai Phong's ongoing collaboration with IGES to develop a Zero Carbon Emission Scenario for 2050.
27. The last open discussion focused on key challenges and solutions for advancing sustainable solutions, highlighting the need for political interest, public engagement, and multi-stakeholder collaboration. Participants pointed out that while community-based approaches and growing citizen awareness are gradually influencing policy, more efforts are needed to sustain momentum. In Phnom Penh, for instance, integrated solid waste management faces difficulties without active public participation in waste sorting, underscoring the role of awareness raising. The discussion emphasized the importance of setting clear goals, ensuring open communication among stakeholders, and fostering transparency. Participants concluded that sustained engagement from governments, communities, and individuals is essential, with open forums for consultation being crucial for building consensus and driving collective action.

CLOSING

28. 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 the City of Kitakyushu, 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 progress towards green transformation.



29. On the following day, 9 October, the international participants also visited environment-related facilities in Kitakyushu City, such as the Takamiya Environmental Museum and Kitakyushu Eco-Town.

The Forum's summary is also available the following websites:

IGES: [The Fourth International Forum on Low Carbon Cities | IGES](#)

ESCAP: [4th International Forum on Low Carbon Cities | ESCAP](#)