Zero Carbon City International Forum OUTPUT DOCUMENT 17-18 March 2021

The Zero Carbon City International Forum was hosted by the Ministry of the Environment, Japan on 17 – 18 March 2021, in full cooperation with the United Nations Framework Convention on Climate Change (UNFCCC), ICLEI- Local Governments for Sustainability and the Institute for Global Environmental Strategies (IGES).

The two-day on-line forum was opened by the Japanese Minister of the Environment and Minister in charge of Climate Change, KOIZUMI Shinjiro and the UNFCCC Executive Secretary, Patricia Espinosa. The US Special Presidential Envoy for Climate, John Kerry, provided an opening video message. Twenty-eight cities and relevant organisations from 15 countries and 11 international organisations and institutions participated in the forum.

Ahead of the 26th Conference of the Parties (COP26) to the UNFCCC scheduled for November 2021, various actions and initiatives are underway across a wide range of countries and regions to raise the level of ambition to achieve net-zero emissions by 2050.

[Addressing climate change and the COVID-19 pandemic together, and need for "redesign"]

In addition to climate change, we are dealing with the COVID-19 pandemic. COVID-19 has deepened social inequality and accelerated unsustainable paths for our society. Climate change is pushing us to make rapid and far-reaching transitions in land-use, energy, industry, buildings, transport, and cities. To address these two crises, it is essential for all countries to cooperate and enhance inclusiveness. Our task is not to return to the pre-pandemic world. Redesigning our socio-economic system for a more sustainable and resilient world is essential, and requires three transitions, namely the transition to a decarbonised society, the transition to a circular economy, and the transition to a decentralised society.

[Importance of cities for a decarbonised society]

Non-state actors are enhancing their actions, aiming to be carbon neutral by 2050, and among others, cities have been moving forward on the transition to a carbon neutral society. Currently 471 cities have joined the Race to Zero global campaign. As of 18 March 2021, 320 Japanese local and regional government, representing over 80% of the national population have declared that they will have net zero CO_2 emissions by 2050.

Cities consume more than two thirds of the world's energy and are responsible for more than 70% of global carbon dioxide emissions. Thus they are a vital part of achieving the long-term climate goals under the Paris Agreement. Cities can be a "laboratory of climate actions" and can show leadership in implementation of the Paris Agreement by developing and implementing a range of policies in collaboration with other stakeholders including businesses, finance sectors, scientific community, civil society groups and especially those who are vulnerable. In this regard, cities can bridge the gap between the state and various stakeholders, and can take a bottom-up approach according to their local situation.

[Support required for cities]

On the other hand, cities are faced with the challenge of integrating an ambitious climate agenda into their city planning while securing a just and fair transition of economy. Collaboration among cities and support from national governments and international organisations is also required to encourage more cities to aim for the net-zero goal as well as to raise their ambitions.

[Collaboration between national and local governments]

There is no question that local governments have an important role in the process of formulating ambitious but yet effective national policies to redesign our socio-economic system for a more sustainable, resilient and decarbonised society. Radical collaboration with local and national government is key to ensuring credible policy planning and implementation. The Council for National and Local Decarbonization was launched by the Government of Japan in December 2020 to discuss a roadmap and concrete measures for developing leading local models for decarbonisation over the next five to ten years and for spreading "decarbonization domino effect" around the country. This Council is an encouraging example of national-local government collaboration.

As more cities join the cause, it will be easier for the national government to commit to a binding target (e.g. climate neutrality by 2050) in their Nationally Determined Contributions (NDCs). Once the national government defines an ambitious target and reflects this into its NDCs, then local and regional governments can be encouraged to elevate their previous commitments (e.g. ambitious targets for 2030), provided that additional financial, technical and political resources are available.

[Create a "Decarbonisation Domino Effect"]

Leading cities can amplify the effect and encourage other cities to join the cause by sharing technical know-how through city-to-city collaboration. Good practices in some areas will be emulated by others in a successive manner. Creating this "Decarbonisation Domino Effect" through leadership and commitment of national and local governments and multilevel collaboration can support more cities to commit to the cause and accelerate the decarbonising trend of the globe.

National governments and international organisations are required to make efforts to trigger the "Decarbonisation Domino Effect" both domestically and internationally.

[A way forward]

Participants at the Forum emphasised that what we need now is to accelerate actions to achieve the Paris target. Cities should take a leadership role on actions for decarbonisation in collaboration with national governments and other stakeholders, and it is expected that more cities will join the Race to Zero. The Forum provided an opportunity for cities and relevant stakeholders to share leading policies and measures toward carbon neutrality, aiming to encourage more cities join the race to zero emission. Recognising this, participants expressed their hope that follow-up actions would be taken to maintain the momentum created by this Forum to continue multistakeholder discussions in the run-up toCOP26.

<Key takeaways from the Forum>

1. Importance of cities and city cooperation towards a carbon neutral society

- Cities can bridge the gap between the state and the various stakeholders and can take a bottom-up approach. The importance of working with local communities was mentioned by city leaders such as Greater London, Yokohama, Nagano Prefecture and others.
- The ambition exhibited by cities is growing, and some cities already aim to be carbon neutral earlier than 2050. For example, the city of Bonn aims to be carbon neutral by 2035 and the cities of London, Glasgow and Bristol by 2030. The State of Hawaii aims to be carbon negative by 2045. Some other cities set clear targets for reduction. For example, DKI Jakarta set a 50% reduction goal by 2030 and Kuala Lumpur aims to be "carbon neutral ready" by 2040.
- ♦ The pathways toward carbon neutrality by 2050 may vary from city to city because of different local contexts.
- Small and medium sized cities have an advantage in that the impact of their policies can spread more quickly compared with larger cities. Such an advantage should be utilised.
- By working together and learning from each other's successes and lessons, cities with common challenges can improve each other's policies. Examples of such city-to city collaboration include Tokyo-Kuala Lumpur collaboration on sustainable buildings, Kitakyushu-Hai Phong collaboration on low-carbon policy and project development, and Yokohama-Da Nang collaboration project on energy conservation.

2. Policy, plans and measures

- Some cities have already taken ambitious actions to transition to a carbon neutral society.
 These cities have addressed climate change and recovery from COVID-19 together in their policy planning and implementation.
- Plans and measures on climate adaptation are also important for cities and regions in places such as Hawaii State, Chefchaouen, and cities in India.
- ☆ Involvement of citizens, especially the youth, is key in policy planning and implementation aiming for transformation towards a carbon neutral society. (e,g, Citizen's Assembly in Bristol; Earth Hour Event organised by university students in Yokohama; Kyoto city's crossunit young officials' team "Future Design Team for 1.5 Degree Future of Kyoto"; and the community-based approach taken by the Strategic Growth Council, California)
- Visualisation of how policies are effective to mitigate climate change and increase quality of life of people can lead to behavioral changes. In Jakarta, behavioral change has been seen in mobility.

- Sharing an awareness of climate crisis and need for actions with people is key for successful policy. Hobart stated that a declaration of climate crisis by Australian cities resulted in promoting people's involvement in climate actions and increasing solidarity among cities and with the national government.
- Integrative actions on climate change and the SDGs can contribute to increased sustainability and resilience in society, which leads to an increase in people's quality of life. Hawaii takes a joint approach to climate change and conservation of natural resources and West Java tries to integrate climate concerns in its economic policies as well as other sectoral planning such as waste and energy. Kitakyushu aims to create RE100 Kitakyushu Model, a model to promote virtuous cycle of environment and economy contributing to increase of quality of citizen's life. Hai Phong developed its Green Growth Promotion Plan that cover cross-sectoral projects to promote sustainability of the city in comprehensive manner with support of Kitakyushu.
- ICLEI and its partners are developing a clear framework for cities and regions to engage in UNFCCC's Race-To-Zero campaign and the upcoming Race-To-Resilience processes. As one of the core building blocks of these campaigns, ICLEI's Climate Neutrality Framework will support local governments to be part of these global initiatives, which can be an important and suitable opportunity for cities. Ahead of COP26, ICLEI will also continue to support local and regional governments globally through the facilitation of the roadmap of Local Governments and Municipal Authorities (LGMA) Constituency "Towards Multilevel Action COP26", in its capacity as the focal point.

3. Renewable energy and integrated management of local resources

- The greening of energy using local resources is being promoted in cities. Examples include wind power generation on islands and in coastal cities and regions in places like Hawaii State and Shanghai, distribution of solar kits in unelectrified areas in India, the mandatory use of renewable energy by real estate companies in EU cities, the use of surplus heat from data centres in Frankfurt, and biomass power generation using driftwood in Hawaii, waste-to-energy in West Java. Kisumu is now developing policy environment enables the city to promote renewable energy use.
- Not all cities have sufficient resources for renewable energy. Collaboration with neighboring communities and cities or other cities in rural areas with higher renewable energy potential is a way to address this issue. In the case of Yokohama, collaboration with cities in other regions helps provide Yokohama with the necessary renewable energy and also brings about other benefits such as strengthening communication and a sense of cooperation.
- ♦ Cross-sectoral projects are conducted in some cities such as energy-mobility in Odawara

and Saitama, smart community development in Hamamatsu.

- Renewable energy projects are implemented with stakeholders including power producers and citizens, and such projects bring benefits to the local community, including employment for local people and improvements to citizens' quality of life Integrated policy of mobility and renewable energy use in Odawara is an example.
- Transformative change to a circular economy is effective in reducing material consumption that also contributes to reducing emissions, as Turku's experience proved.

4. Cooperation with finance sector and businesses

- ♦ There is a need to improve access to domestic and international funding mechanisms in light of ESG investment trends. Tokyo and London has been promoting green finance.
- Financing institutions can be an interface to facilitate sustainable and resilient city development. PTSMI established facilities based on the ESG framework that make cities to incorporate social and environmental in their development projects. The Green Climate Fund (GCF) supports green city development in developing countries such through policy supports and capacity development.
- ♦ In some cities, long-term funds such as pension funds are being divested from fossil fuels, as seen in London.
- Investment opportunities in decarbonising projects in cities have been growing as part of the green recovery. Ambitious target setting and actions toward net-zero emissions bring new investment opportunities and promote innovations as can be seen in Indonesia and Malaysia. It is necessary to enhance this trend.
- Multi-stakeholder involvement is being promoted, including companies and universities to make zero-carbon city development projects attractive to investors in UK.
- ♦ Distinctive role of sharing between public and private sector is a key for the success of the partnership, as Saitama's public-private partnership of sustainable and resilient city development.
- ♦ Kuala Lumpur sets targets for the introduction of renewable energy to business building to promote energy saving and increase energy efficiency in building sector.
- ♦ The introduction of carbon pricing systems such as emissions trading in the region has encouraged companies to change their behavior as seen in California.
- ☆ The role of public-private collaboration and international cooperation in expanding advanced initiatives is important. In Koriyama, the city-to-city knowledge exchange with Essen facilitate collaboration of not only between cities but also among private sector in both countries.

5. Resigning urban infrastructure with partnership of others

- ☆ Compact city policy can contribute to reducing CO₂ emissions, but also can bring multibenefits such as improvements in people's quality of life, regeneration of community in city centres, and a reduction in administrative costs, as shown the compact city policy of Toyama.
- ♦ Urban development through science-based redesign of buildings and transport infrastructure, and a modal shift to walking and cycling, can reduce greenhouse gas emissions over the medium to long term. This has been proven in cities such as Jakarta, Kuala Lumpur, and others.
- A flexible framework in consideration of local contexts is important to promote decarbonising urban development. Political leadership and incorporation of NDC in urban planning were also pointed out as important aspects to promote zero-carbon urban development.
- ☆ In the redesign of infrastructure systems, the use of digital technologies is essential, such as the construction of IoT communication networks and the improvement of transport efficiency (MaaS), as shown in the example of Toyama.
- Science-based urban redesign initiatives are underway, such as the development of emission inventories and spatial and temporal analysis of emissions. US cities including Des Moines promoted the related initiative with ICLEI. Gwangju promotes engagement of citizens in designing resilient and less GHG emission urban development by providing science-based climate information. Cities in India participating in C40 such as Chennai, and Kolkata have developed community-wide GHG inventories.
- Measures are being implemented to decarbonise buildings not only for new buildings but also for retrofitting, such as measuring building performance and providing financial support to the construction industry. Historical cities like Glasgow and Kyoto are working on this challenge.
- Political leadership for green mobility, including modal shifts, congestion reduction, slow mobility and next-generation vehicles can be seen in Glasgow, Jakarta, Kuala Lumpur, and other cities.
- ♦ Efforts are being made to encourage citizens to change their behaviour using nudges, such as promoting health through a shift to a walking lifestyle practices in Toyama.
- Climate Smart Cities Assessment Framework of the government of India is utilised to create a ranking for the most livable and best performing cities with criteria such as energy efficiency, green building, mobility, and biodiversity.