

**UNCRD / UN DESA Side Event at
The Second Meeting of High-Level Political Forum on Sustainable Development
New York, High-level Segment**

Promoting Resource Efficiency for Sustainable Urban Development

Report

United Nations Department of Economic and Social Affairs (UNDESA) and United Nations Centre for Regional Development (UNCRD) co-organized a side event, entitled Promoting Resource Efficiency for Sustainable Urban Development at the Second Meeting of High-Level Political Forum on Sustainable Development on 7 July 2014 from 1:15 p.m. to 2:30 p.m. at the Conference Room C in the Conference Building, United Nations Headquarters in New York. It was supported by the Ministry of Foreign Affairs of Japan (MOFA), Ministry of the Environment of Japan (MoEJ), the City of Kitakyushu, Toyota City, Ministry of Transportation of Indonesia, UNEP, UN HABITAT, and ITDP. The theme of the Second Meeting of the High-Level Political Forum on Sustainable Development (HLPF) is “Achieving the MDGs and charting the way for an ambitious post-2015 development agenda including the SDGs”.

Opening the side event, H.E. Mr. Norio Mitsuya, Parliamentary Senior Vice-Minister for Foreign Affairs of Japan, expressed his sincere appreciation to the UNCRD and UNDESA for organizing the side event. He mentioned that taking advantage of the fact that the UNCRD Headquarters is based in Nagoya City, Japan, the Government of Japan had maintained a close cooperation with the UNCRD since its establishment in 1971. As regional development is one of the critical elements for achieving sustainable development, he expressed hope that the side event would provide significant and timely inputs to the discussions on Sustainable Development Goals and post-2015 development agenda. While recognizing the existing solid partnership with the UNCRD and DESA, he mentioned that UNCRD had been addressing various challenges of cities in line with the outcome document of Rio+20, “The Future We Want.” In this context, Japan has been actively collaborating with the UNCRD for the promotion of EST (Environmentally Sustainable Transport) and 3Rs (Reduce, Reuse and Recycle) initiatives in Asia in particular. He reaffirmed Government of Japan’s firm commitment to continued cooperation in those main components of sustainable urban management.

Delivering an opening statement on behalf of Mr. Nikhil Seth, Ms. Ndey-Isatou Njie of DSD/UN DESA welcomed the dignitaries, supporting organizations, panel members and participants. She highlighted that sustainable cities and sustainable urbanization was on the forefront of development concerns. Member states have put clear emphasis on these issues in the context of Rio+20, the subsequent OWG SDGs and the global processes leading towards the post-2015 development agenda. Cities are the center of development opportunities. But with opportunities comes challenges, in terms of providing adequate affordable services, such as energy, water and sanitation, social service provision, affordable and accessible clean transport systems and favorable economic conditions. It is therefore clearly where the future of sustainable development will be determined. A development challenge that requires a truly integrated approach to planning, decision-making and policy design. While referring to UNCRD’s activities on Integrated Regional Development Planning, she highlighted major initiatives of UNCRD in the areas of sustainable urban management such as 3Rs and resource

efficiency, environmentally sustainable transport (EST), as well as disaster management planning. She expressed hope that the Regional Forums organized for Asia on EST and Asia and the Pacific on 3Rs and the Declarations adopted at the Forums would play important roles in implementing the Rio+20 outcome - *The Future We Want* and the relevant SDGs once they are adopted. She finally recognized the impressive achievement made by Japanese cities such as Kitakyushu and Toyota, and expressed her appreciation for Kitakyushu's invitation to UN DESA to the "International Conference on Future of Cities" held in Kitakyushu in 2013.

Making the first panel intervention, Dr. Elly Sinaga addressed the plan for building efficient intra-city and inter-city public transportation system in Indonesia towards sustainable urban development. She underscored the fact that Indonesia is the world's largest archipelagic country comprising of 17,508 islands. Indonesia is the world's 4th most populous country (after China, India and US) with population growth of 1.2%, adding the size of Singapore's population in every 2 years. With such rising population and growing transport demand, Indonesia is faced with a number of transport related problems, including heavy traffic congestion, low share of public transportation services, high rate of road accident and growing air pollution in major cities. One of the critical problem is the sharp rise in motor cycle population in all cities and their modal share of 62.9% as compared to only 16.7% share by public transport. In order to address these, Indonesia has ambitious plans in its transport infrastructure developments, including MRT Jakarta Stage 1 (15.1 km) by 2016; Monorail Jakarta Green Line (14.3 km) by 2016; Jakarta Airport Rail (33 km) by 2016 and Double Track Cirebon – Surabaya (280 km) by 2014. As part of multi-modal transport development in Java Corridor and improve inter-city transportation network, Indonesia is taking up a number of initiatives such as building by-pass and toll road along Northern Java Corridor; double track railway line to improve railway capacity; introduction of high-speed train; elevated crossings to reduce travel time and accident at level crossing; and short sea shipping to shift freight from road transport to maritime. Indonesia is also putting up considerable efforts to improve the passenger as well as freight transport fuel saving. The benefits of developing a multi modal transport system are not only limited to fuel and CO₂ reduction, but also include reduction of road maintenance cost and, more importantly, reduction in road accident rates.

Making the second panel intervention, H.E. Mr. Shinji Inoue, Senior Vice-Minister of the Environment, Japan, elaborated how Japan is promoting 3Rs and resource efficiency policy towards achieving a sound material cycle society. First, he defined a "Sound Material-Cycle Society" as a society in which the consumption of natural resources will be conserved and the environmental load will be reduced to the greatest extent possible, by preventing or reducing the generation of wastes, and by promoting proper cyclical use of products like reuse, recycle, and heat recovery, and by ensuring proper disposal of circulative resources or recyclables. With the economic growth and population increase, mainly in Asia, the amount of waste generation has been rapidly increasing with diversification of waste streams. In developing countries, there are wide spread cases of environmentally inappropriate disposal and hazardous recycling activities. He emphasized the importance of establishing multilayer partnerships as part of Japan's bilateral cooperation, such as the on-going bilateral cooperation between Kitakyushu City and Surabaya City. The market for waste management and recycling businesses in Asia is expected to expand to 35 billion USD by 2020, and Japan is committed to the environment preservation in Asia by transferring Japanese environmental technologies and providing

institutional capacity building together as a package. In this regard, he highlighted the ongoing cooperation with UNCRD in convening the Regional 3R Forum in Asia and the Pacific, with host countries including Japan (2009), Malaysia (2010), Singapore (2011), Viet Nam (2013) and Indonesia (2014). He recognized the growing scale of the Forum with an expanding membership of countries and attached due importance on the implementation of the Hanoi 3R Declaration (2013-2023) and Surabaya 3R Declaration (2014).

Sharing the experience of the City of Kitakyushu in realizing a resource efficient and zero waste city, Mr. Hiroshi Imanaga, Deputy Mayor, mentioned that his City was selected as a Green Growth City by OECD in 2011. The OECD Report on Green Growth in Kitakyushu, Japan, describes Kitakyushu as a city with one of the lowest rates for municipal waste production and is striving to achieve further green growth with strong engagement of its citizens. The vibrant multi-stakeholder partnership among the citizens, local government, and private sector has been a key factor for the transformation of Kitakyushu city from once-a-heavily-polluted city to an eco-city earning international recognition. By implementing cleaner production measures, Kitakyushu City has systematically demonstrated the co-existence of both economic development and environmental improvement. Source separation of wastes with active participation of communities and citizens has been in the forefront of Kitakyushu in achieving efficient resource circulation and zero waste society. Approximately 70% of the city's residents have taken part in various environmental protection activities. At the same time, the private enterprises play a very crucial role in implementing EPR (Extended Producer Responsibility). Kitakyushu Eco-Town houses a practical research area and a comprehensive eco-industrial complex, demonstrating state-of-art industrial symbiosis. There are more than 80 ongoing projects, and more than 66 billion Yen has been invested. As a result, there is a large scale CO₂ emission reduction and resource savings, as well as economic development. Kitakyushu has also fostered international cooperation through city-to-city (C2C) cooperation, such as the one with the City of Surabaya, which introduced a new solid waste management system with community-based composting in 2002 and achieved a 30% reduction in reclaimed solid waste. The Deputy Mayor also highlighted the cooperation with UNCRD under the framework of the Regional 3R Forum in Asia and the Pacific.

Ms. Yamina Djacta, Director, UN-HABITAT NY Office and Dr. Stefan Al, Associate Professor of Urban Design, Department of City and Regional Planning, University of Pennsylvania, jointly addressed the importance of land use efficiency and compact city design in sustainable urban development. Ms. Djacta explained that HABITAT promotes resource efficiency through urban configuration so as to plan and design cities and human settlements with reduced use of resources per capita. She highlighted the collaborative relationship with UN/DESA and invited the participants to the preparatory process for HABITAT III planned for in the coming September. Dr. Al explained that compact city is a high-density and mixed-use development as opposed to urban sprawl. The notable example of the former is Manhattan, New York, while the example of the latter being Phoenix, Arizona. He emphasized that compact cities integrate green spaces bringing in energy, environmental, social and economic benefits. Through significant reduction in commuting distance and reduction of energy usage in multiple-home building, compact cities deliver the most benefits in terms of energy efficiency. While environment benefits includes land preservation through more efficient use of land, the economic benefits can be harnessed through minimization of per capita cost for construction. Improved social interaction and networking, among others, are key social benefits

of a compact city. He elaborated a number of other examples of cities, which have systematically demonstrated the benefits of a compact city. For instance, Green Heart in the Netherlands prohibits development in the central green area with compact cities surrounding it. Singapore, with its limited land area, demonstrates very innovative approaches on land use efficiency by integrating transport, urban agriculture and urban reservoirs. Masdar City of U.A.E. maintains a rigid square outline of the city so as to remain compact. Curitiba of Brazil, which is well known for its creative approach, has successfully upgraded with limited resources, and using series of axes, the City maintains “compact city” through mixed-use (commercial, business and residential use) with integration of mass transit system. He concluded by reiterating that compact cities are more sustainable urban form that reduces energy use, prevents environmental degradation, fosters economic development, and improves quality of life.

Introducing the Green Building Initiative of UNEP, Mr. Jorge Laguna-Celis outlined the global economic impact of the building sector, which represents 10% of global GDP, and even higher in some rapidly developing countries. The annual expenditures in the building sector is expected to increase to \$12 trillion by 2020 from the current level of more than \$7 trillion. As per UNEP’s “Green Economy Report (2011)”, the building sector can be called the industry of “thirds” - with over a third of all CO₂ emissions come from building; over a third of all energy and material resources is used to build and operate buildings, and over a third of total waste generated results from construction and demolition activities. By 2030, 80% of the world’s population will be living in cities in Africa, Asia, and Latin America, and by the same time, 40% of the population (3 billion people) will need access to housing. The critical challenge is to meet this demand in a resource efficient way in relation to water, energy, and raw material consumption, carbon emission and waste generation. Buildings are responsible for 30% GHG emissions, 40% energy consumption, 30% natural resource consumption, 40% waste generation, and 25% water consumption in major growth regions (Africa, Asia, Middle East, and Latin America). The key actors in greening the building sector supply chain include owners and developers, regulators, designers, contractors, product providers, material extractors, transporters, operators and users, GBCs, financial institutions, and schools and universities. At the same time, the major barriers include lack of appropriate policy frameworks, information, awareness and knowledge about potential benefits, as well as undefined responsibilities (owner, designer, contractor, etc.) and procurement requirements, among others. Key focus of UNEP’s Sustainable Buildings and Climate Initiative (SBCI), launched in 2006, includes application of green principles and assessment at each link (intervention point) of the supply chain – energy-carbon-waste-water-raw materials. A more resource efficient city and local building sector can reduce the demand and cost of infrastructure and improve delivery of city services, such as waste management, transportation, energy and water supply. Links and integration among sectors can advance resource efficiency in cities and at a national and global scale. A focus on building supply chains will reveal opportunities also for transforming energy, water, waste and transport sectors, material consumption and waste generation, and will support transitions to greener, more sustainable economies. All these call for broader application of life cycle approach in building design.

Making the last panel intervention, Mr. Toshihiko Ota, Mayor of Toyota City, Japan shared his city’s experience in promoting low-carbon society. In 2009, Toyota City was designated by the Government of Japan as an Environmental Model City, which aims to reduce the emission of

CO₂ by 30% by 2030. One of the notable initiative of Toyota City is implementation of “Smart Community” project, which promotes local production and consumption of renewable energy as well as the optimization of energy use and affordability. About 50 organizations, including universities, both large companies, such as Toyota Motor Corporation, and small companies, have joined the project. Toyota City is also working towards next generation automobiles with energy saving technologies and modern information technologies, to present consumers with optimal recommendations based on weather and road conditions, and on forecasts of consumer behaviour in order to coordinate power supply and demand and traffic volumes. This program has attracted attention from at least 70 countries around the world in the last two years. He finally made an announcement that Toyota City and the United Nations Department of Economic and Social Affairs (UN DESA) were planning to co-organize a High-Level Symposium on Sustainable Cities in Toyota City in early 2015 with the theme of “Connecting People, Environment and Technology.”

Delivering the concluding remarks, Mr. Nikhil Seth, Director of DSD/UN DESA, thanked all the panellists for their presentations and indicated that all these different issues are woven together in very crucial way in achieving sustainable city management. Noting that the bulk of humanity will live in cities for the next 20-30 years, he highlighted that the solution to the humanity lies in the cities. Each of the issues addressed at this side event presents the problem of the present needs and the needs of future generation, and therefore solving them is what sustainable development is about. Noting that Japan offers much to teach the world, he recognized the impressive achievements made by the Cities of Kitakyushu and Toyota, in particular the way they involve multiple partners, including the private sector and the citizenry. Noting that the system of governance of urban areas is very different from the intergovernmental process at the UN, he pointed out that it is the mayor, governor, the enlightened citizenry that determines the fate of the citizens of the cities. He also recognized the challenges faced by the municipal solid waste management in the developing cities and took note of the various transportation problems and challenges faced by Indonesia. With all the rich information on policies and experiences presented at the side event, he encouraged the participants to spread the messages to all the cities and communities. He expressed hope that the symposium planned in Toyota City early next year will be another opportunity to spread such messages. In concluding, he thanked all the supporting organizations, resource persons and participants for joining the side event.