

Summary Report

1. Background

A series of knowledge sharing events on the green agenda was organized in the margin of GGGI's the 9th Session of the Assembly and 13th Session of the Council (Joint Session) during the last week of October 2020.

The purpose of the events is to provide a forum for participants, who are representatives from governments and donors, partner organizations as well as GGGI country/thematic teams:

- To present GGGI and its Members & Partners' efforts and commitments to green growth solutions, highlighting key achievements and initiatives, and
- To share experiences, good practices, and lessons learned on Members' transition towards green growth and identify common regional perspectives, priorities and solutions.

2. Event Overview

Event title	Circular Economy in Waste in Secondary Cities/Green Cities
Date and Time	October 29 th , 2020, 15:00 – 17:00 Korea Standard Time (KST)
Venue	Hybrid (a combination of in-person attendance – usually GGGI HQ staff – and online participants through Zoom
Format	Webinar – presentations and panel discussions
Number of attendees	93 participants (including 15 speakers)

^{**} Sessional documents, including presentation slides and recordings, are available at the Sway platform: https://sway.office.com/WMdiTILgEp7SeDCU?ref=Link

3. Key highlights

1) Introduction

Cities account for 1% of the world's land usage, but for 55% of the world's population, 75% of the world's energy use, and 80% of the world's emissions. To make cities green, some of the key transformative we need to achieve include waste to resources; water resource management and enhancing investment prospects for green finance.

Secondary cities are critical for our urban future and there is great opportunity to influence the early growth of these cities. It is also the desire of many GGGI members to support secondary cities, while they are often a forgotten part of the urbanization agenda. GGGI has been working on a number of secondary cities to make their growth green and sustainable.

This event focused GGGI's work with partners in circular economies (waste and sanitation) in



secondary cities.

2) GGGI's approach to sanitation in support of green growth agenda and outcomes (moderated by Nathalie Andre, Specialist, Sanitation Policy Solutions, GGGI)

Need for greater investment in sanitation projects and importance of innovative partnerships: A common issue for sanitation in many countries is that there is lack of investment due to the lack of bankable projects and inadequate policy and regulatory environment to facilitate investment and integration in the Climate agenda. Huge amounts of waste are not treated in many developing countries (less than approx. 7% in Nepal and Senegal), which has significant public health issues including infectious diseases and cholera.

Senegal is making efforts to improve the involvement of the private sector to close the financing gap in sanitation. To develop private sector investment, Senegal is identifying tax related measures that can bring more effective private sector involvement in different points of the value chain, and work is being done in reviewing the relevant regulatory and policy frameworks. Related to the need for greater investments, the importance of innovative partnerships and Public-Private Partnerships were highlighted by Mouhamadou Gueye, Director, Non-sewered Sanitation Direction, National Office of Sanitation of Senegal (ONAS). According to Mouhamadou Gueye, PPPs may not only better address the financing needs through identifying various business opportunities in the value chain, but they can also lead to opportunities related to byproducts in agriculture and create income generating activities.

Linking sanitation and climate change: There are many linkages between sanitation and climate change, both on the side of mitigation and adaptation. For example, in terms of mitigation, the storage of untreated wastewater and fecal sludge in septic tanks and pit latrines leads to the buildup of greenhouse gases, especially methane. Also, the waste-to-energy potential of fecal sludge is considerable as it can be used to produce biogas, which would reduce dependency on fossil fuels for energy. In terms of adaptation, greater temperature and rainfall variability increases the vulnerability of and undermines the effective operation of sanitation systems, such as through damage to sanitation infrastructure, which could result in infectious disease transmission. Also, higher water temperatures compound the effects of sanitation pollution through the greater proliferation of algal blooms.

Enhancing the understanding of local authorities and raising the awareness of donors of this clear linkage is important for mobilizing more funding and support in sanitation projects, as emphasized several speakers including *Roshan Shrestha*, *Deputy Director*, *Bill & Melinda Gates Foundation* and *Romain Brillie*, *Country Representative*, *GGGI Senegal*. The current challenge is that national climate policies in many cases do not sufficiently account for the sanitation impact of climate change, and that climate change issues are not integrated in sanitation policies.

According to Ramakantha Duwadi, Joint Secretary, Ministry of Water Supply for Nepal, Nepal has recognized that climate change is an integral element of Water, Sanitation and Hygiene (WASH),



and have integrated sanitation in its enhanced NDCs. This would place Nepal at a better position to seek additional climate finances to support its sanitation sector.

GGGI and Sanitation Programs: GGGI's sanitation program offers a novel approach to accessing the much-needed climate finance through emphasizing the strong links between sanitation and climate change. The sanitation program contributes to meeting four Strategic Outcomes outlined in GGGI's Strategy 2030: 1. GHG emissions reduction; 2. Creation of green jobs, 3. Increased access to sustainable services, and 4. Enhanced adaptation to climate change.

There is also the University of Bristol consortium project, supported by Bill and Melinda Gates Foundation, in which new methodologies for calculating emissions from sanitation, being developed in Senegal, and commercial technical and viability studies of biogas production from secondary waste streams (including fecal sludge) are underway in Nepal.

3) GGGI's approach to waste management (moderated by Donovan Storey, Global Lead – Green Cities, GGGI)

Waste is resource in the wrong place: Waste is a critical issue, and particularly this year due to the COVID-19 pandemic, the world has felt how rapidly increasing waste streams can put significant pressure on our system. Waste is resource in the wrong place, and the world needs to move towards a circular economy. Only 10-13% of waste is being recycled annually, and the closing of China's doors to waste earlier this year is not a crisis but an opportunity, one where we can find local responsibility and solutions to waste through innovative thinking partnerships.

Luxembourg has positioned itself as an anchor for circular economy and expects its government to adopt a national policy on circular economy at the end of the year, as presented by André Weidenhaupt, First Counsellor, Ministry of Environment, Climate and Sustainable Development, Luxembourg. The European Green New Deal is also followed by a circular economy action plan that focuses on multiple sectors including batteries, vehicles, packaging, plastics, textiles, construction, food, water and nutrients. Pod Estell Ndour, Head of Waste Management Department, Solid Waste Management Unit (UCG) in Senegal, highlighted that Senegal, in 2013, adopted a paradigm shift viewing waste not as waste but a s a resource. As indicated from the presentation by Aaron Drayer, Country Representative, GGGI Peru, in Peru, GGGI identified a series of opportunities for organic waste valorization, and it is working with the Metropolitan Municipality of Lima to improve the collection, treatment, and valorization of organic waste.

Increasing Collection and Improving Separation and Recycling: The waste collection rate in many developing countries is low due to lack of services and waste facilities. For example, in Peru, only 2% of 6.8 million tons of municipal solid waste was recycled in 2016, and more than 50% of it is organic waste. To address this issue, one of GGGI's projects in Peru aims to divert organic waste from 48 markets in Cercado de Lima from the landfills through a robust waste segregation program. In Vientiane, capital of Lao PDR, decentralized waste collection services were key in increasing access to adequate waste collection and source separation. Senegal is also working to improve their



collection rate, and at the same time focusing on recycling and valorizing plastic and organic waste.

Education and Behavioral Change: Related to improving separation and recycling, education and behavioral change were also noted to be key factors. Experience in Battambang, one of the seven secondary cities in Cambodia, as presented by Chek Noy, Municipal Technical Coordinator, Waste Management, Battambang city, Cambodia, showed that the education of core communities on how to separate waste was important in engaging the local population. Furthermore, the task of raising awareness was delegated to local communities, which was also an important factor for enhancing ownership. Mr. Bounchanh Keosithamma, Director General of Vientiane City Office for Management and Service (VCOMS), Lao PDR and Jaeseung Lee, Country Representative, GGGI Laos, highlighted that in Vientiane, waste recycling banks were installed in schools to increase the recycling rate and educate the future generation on the importance of effective waste management. The importance of providing the right incentives was also mentioned in inducing behavioral change in all countries.

Waste Management as a Climate Issue: The municipal government needs to perceive waste management as a climate issue and be aware of the benefits of incorporating climate finance projects into broader strategies. Often, municipal governments are looking for immediate solutions, while climate finance projects focus on long-term results.

GGGI and its Support in Waste Management: In supporting Members and partners for effective waste management for green growth, GGGI assists in: 1) evaluating and valorizing waste value chains; 2) shifting away from landfill dependent systems; 3) supporting local systems and responsibility; 4) engaging all stakeholders in change; 5) providing roles for the private and informal sectors; and 6) investing in smart systems and approaches. GGGI's key interventions in providing this support include policy development, projects addressing separation at source, converting dumpsites into material recovery facilities, valorizing waste materials, and collecting and utilizing data to rationalize collection systems.



Annex 1. Program details

Circular Economy and Waste in Secondary Cities/Green Cities

Overview

This event serves as a forum to present GGGI's approach and impact on circular economy for green growth with a specific focus on waste management and sanitation and explore with participants the ideas on how to accelerate the adoption and scaling of solutions. In particular, the session will highlight waste projects and approaches in Lao PDR, Cambodia, Nepal and Senegal, identifying how integrated solutions can be found to support green growth through circular economies, and new initiatives in Peru and Uganda. The session will additionally highlight innovation in approaches linking sanitation to climate change addressing adaptation and mitigation in national policy through the NDC as well as municipal planning and building a pipeline of sustainable and inclusive investments for sanitation.

Agenda	* Times in Korea Standard Time
15:00-15:05	Opening & Introduction Dr. Donovan Storey, Global Lead - Green Cities, GGGI
15:05-15:15	GGGI's approach to sanitation in support of green growth agenda and outcomes Ms. Nathalie Andre, Specialist, Sanitation Policy Solutions, GGGI
15:15-15:45	Innovation in Sanitation Moderated by Ms. Nathalie Andre, Specialist, Sanitation Policy Solutions, GGGI Mr. Mouhamadou Gueye, Director, Non-sewered Sanitation Direction, National Office of
	Sanitation of Senegal (ONAS) Mr. Romain Brillie (Country Representative, GGGI Senegal)
	Mr. Ramakantha Duwadi, Joint Secretary, Ministry of Water Supply for Nepal
	Mr. Rowan Fraser (Country Representative, GGGI Nepal) Dr. Roshan Shrestha, Deputy Director, Bill & Melinda Gates Foundation
15:45-15:55	GGGI's approach to waste management Dr. Donovan Storey, Global Lead - Green Cities, GGGI
15:55-16:25	Supporting more effective and innovative waste management Moderated by Dr. Donovan Storey, Global Lead – Green Cities, GGGI Dr. André Weidenhaupt, Premier Conseiller de Gouvernement, Ministère de l'Environnement,
	du Climat et du Développement durable, Luxembourg
	Project exemples by : Mr. Bounchanh Keosithamma, Director General of Vientiane City Office for Management and
	Service (VCOMS), Lao PDR on "Solid waste management and Sanitation"
	Mr. Chek Noy, Municipal Technical Coordinator, Waste Management, Battambang city,
	Cambodia on "Waste management in Battambang city, Cambodia"
	Ms. Pod Estelle Ndour, Head, Waste Economy Department, Solid Waste Management Unit
	(UCG), Senegal



16:25-16:45 Looking forward: New country initiatives in Peru, Lao PDR

Mr. Aaron Drayer, Country Representative, GGGI Peru Dr. Jaeseung Lee, Country Representative, GGGI Laos

16:45-17:00 Q&A and concluding remarks

Moderated by Dr. Mahamadou Tounkara, Director, Office of Director-General, GGGI



Annex 2. Acknowledgements: Organizing and Facilitation Team



Frank Rijsberman



Mahamadou Tounkara



Christopher Dickinson



Christina Cheong



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Donovan Storey



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Seungyeop Baek



Hee Kyung Son



Su Jeung Hong



Kyu Hwa Park



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