Seventh Regional 3R Forum in Asia and the Pacific
"*Advancing 3R and Resource Efficiency for the 2030 Agenda for Sustainable Development*"
Adelaide, SA, Australia, 2-4 November 2016

City Report

(Draft)

< Suwon>

This city report was prepared by Suwon as an input for the Seventh Regional 3R Forum in Asia and the Pacific. The views expressed herein do not necessarily reflect the views of the United Nations.

Guideline for City Reporting on Major Initiatives/Achievements in 3R areas

The main objective of the City Reporting is to share among international community the progress, achievements and best practices, including various challenges faced, in the areas of **3R (Reduce, Reuse, Recycle)** and sustainable waste management. This would help development agencies, donors, including development banks, in assessing the needs and challenges of cities to better devise their existing as well as future capacity building programmes and operations in the field of 3Rs and sustainable waste management.

It would be appreciated if a consolidated city report could kindly be prepared by answering the following questionnaire and submitted to the **Secretariat of the Regional 3R Forum in Asia and the Pacific** by email to 3R@uncrd.or.jp

Timeline for submission: **30 September 2016**
Secretariat of the Regional 3R Forum in Asia and the Pacific
United Nations Centre for Regional Development (UNCRD)

City Report [City Name: Suwon City, Korea]	
Q1	**What are the roles of local government stipulated in the 3R-related policies, acts, laws, or regulations?**
	The roles of Suwon City Hall are to nurture public consciousness toward "3R" and cut waste generation within its jurisdiction through reducing, reusing and recycling waste. By considering the characteristics of the region, the city is also the authority for establishing and enforcing policies that can promote the circulation of resources.
Q2	**Is 3R policy integrated in your city development strategy or master plan?** (Please attach photo(s) of your city's waste management if available.)
	Yes => Please share goals/visions/major achievements/important lessons learnt that could be replicated elsewhere. 1. Goal (direction) of policy: Creating futuristic eco-city where nature, environment and people coexist O Set up efficient resource-recycling society - Promote general measures for reducing waste - Establish urban system of recycling resources - Stimulate activation of "food-to-resources" - Operate and manage waste disposal facilities stably

2. Major accomplishments

O Promoting "War & Love Project" on wastes (figures below compared to 2015's)

- Waste reduction: 6,074 tons annually (33 tons/day)
- Increase in recycled products: 2,137 tons annually (12 tons/day)

O Nurturing public consciousness toward 3R: Promoting separated discharge of recycled products and visiting eco-circulation facilities

O Operating resource recovery facilities (incineration plants), food-to-resources facilities and resource circulation centers

3. Model case of recycling discarded batteries

O Period: 2014~15

O Collected amount: 127 tons

O Method of collection/disposal

- Collection (schools, households, companies) -> Pickup/transportation (Suwon City Hall) --> Disposal (Korea Battery Recycling Association)

O Case studies of activities

- Collecting and recycling discarded batteries en masse through forming cooperative system of citizens, companies and schools
- Opening events such as Discarded Battery Collection Contest

O Expected effects: Reduce waste by increasing public consciousness toward 3R

O Photos of discarded battery collection activities

NGO (Saemaul Women's Society) collects discarded batteries

Collected discarded batteries weighed (recording and managing collected volume)

Discarded batteries collected

Discarded batteries collected and transferred to Suwon City Resource Circulation Center

Q3	**What are the major challenges and constraints faced by your city in implementing 3R policies and programmes?** (Please answer only if your answer to Q2 is "Yes")
	1. In promoting the 3R policies of Suwon, public consciousness toward 3R and the power of implementing policies greatly differ based on the dwelling styles of residents. In areas with detached homes, the practice of 3R is relatively inactive because of no management office with monitoring functions, rendering the execution of policies difficult. O Apartments: The effect of 3R is high because of management offices. O Ordinary (detached) houses: The effect of 3R is low because of no management office. 2. With a jurisdiction area of 121.05km^2 and a population of 1.2 million (as of January 1, 2016), Suwon is a large city with the country's highest population density of 10,094 residents/km^2. The lot for the 3R facility (Suwon City Resource Circulation Center) is small, however, and finding additional lots where such a facility can be expanded is difficult. This is a major limitation for the city to promote its 3R policies.
Q4	**What programme is in place in your city to support NGOs activities towards promotion of 3Rs?**
	By creating an organic network with NGOs such as the Suwon City Regional Office of Korea Saemaul Undong Center, YMCA and YWCA, the city government is conducting 3R-related governance. Yet the city is not yet operating programs that directly support their specific activities.
Q5	**Is there any collaborative 3R related activity/project/partnerships with cities and organizations at international level?**
	☐ No (N/A)
Q6	**Even if your city doesn't have any dedicated 3R policies/programmes/activities, what future prospects or opportunities does your city have in 3R areas?**
	As mentioned in Q2, the Suwon municipal government has set a political goal of ultimately reducing waste discharge to zero vis-a-vis 3R. To achieve this goal, the city is focusing on creating a society of efficient resource circulation by cooperating with citizens.

Q7

What type of 3R infrastructure and facilities your city is equipped with? Please tick the appropriate.

Type of 3R infrastructure and facilities	Adequate/Significant	Not-Adequate/ Non-significant
□ Waste collection facility	☑	☐
□ Waste segregation facility	☑	☐
□ Waste storage facility	☑	☐
□ Waste processing & treatment facility	☑	☐
□ Resource recovery facility	☑	☐
□ Waste recycling facility	☑	☐
□ Waste to energy facility	☑	☐
□ Eco-industrial zones	☐	☑
□ Science parks/theme parks relevant to 3R	☐	☑

□ Others (summary of facilities)

- Resource recovery facility (incineration plant): 600 tons/day (processed amount), 37,120m^2 (area)
- Resource circulation center (recycling): 190 tons/day (processed amount), 90,444m^2 (area)
- Food-to-resource facility: 259 tons/day (processed amount), 23,460m^2 (area)
- Vehicles collecting/transporting domestic waste: 13 companies/192 vehicles (2.5-ton/64 vehicles, 5-ton/128 vehicles)
- Vehicles collecting/transporting construction waste: 328 vehicles (25-ton)
- Domestic waste storage facility: 1 facility/4,800 tons (area: 540m2)
- Construction waste crusher: 3 facilities/1,600 tons/hour
- Domestic waste reshipment facility: 8 facilities/21,613m2 (area)
- Construction waste storage facility: 3 facilities/17,398m2 (area)

Q8

Kindly provide the important 3R policies/programmes/projects/master plans that your City Government plants to undertake within next five years (2016-2021)

1. Reducing volume of waste discharged in Suwon to zero

O Reducing from stage of waste discharge --> 10% (improving public consciousness)

O Reducing food waste --> Creating "Zero Food Waste Suwon"

* Cutting 10% of food waste by 2020

2. Promoting higher rate of resource recycling by 10% or more

O Creating resource circulation culture together with citizens --> Accomplishing recycling rate of 67%

O Securing proper disposal capacity for recycling facilities --> Establishing cooperative system between public and private sectors

3. Continuously striving to make recycling a way of life

O Operating forum for recycling resources --> Network among NGOs, experts and local governments

O Using Upcycle Plaza (remodeling building of College of Agriculture and Life Science, Seoul National University) --> Manufacturing, exhibiting and selling recycled products

In response to the 2030 Agenda for Sustainable Development, in particular SDG 11 (*Make cities and human settlements inclusive, safe, resilient and sustainable*) and SDG 12 (*Ensure sustainable consumption and production patterns*), how is your City planning to advance 3R and resource efficiency related measures?

Q9

Plans for Resource Circulation City Suwon 2030

1. Vision: Suwon, World's Best City for Resource Circulation

2. Purpose

O Creating "Zero Waste" Suwon --> Realizing futuristic eco-city by promoting virtuous cycle of resources

O Launching civic movement for discharging zero domestic waste --> Achieving clean city by reducing waste

O Implementing process of completely turning food into resources --> Fully collecting food waste for feeds and fertilizers

O Expanding process of turning cinder into energy (reducing volume for incineration) --> Manufacturing solid fuel

O Continuously upgrading resource recovery facilities --> Improving efficiency of incineration plants and recycling facilities

3. Preparation

O Devising basic (implementation) plan for resource circulation: Setting and managing goals for resource circulation

O Enacting ordinances for resource circulation: Supporting jumpstart of resource circulation and expanding use of circulated resources

O Setting basic plan for disposing waste (unit of 10 years): Managing goal of reducing volume of domestic waste to zero

O Creating culture of resource circulation together with citizens: Developing cooperative system among public, private, industrial and academic sectors

O Operating forums/portals (on/off-line) for resource circulation: Connecting NGOs, experts, applications and social workplaces

O Designating and operating designated facilities (zones) for resource circulation: 3R Theme Town, Upcycle Plaza, Clean Village

O Offering incentives to communities that actively practice resource circulation: Communities, schools, organizations

O Operating economical facilities for resource collection: Developing technologies, building new facilities and introducing model case studies

O Providing resident-friendly cleaning service: Reducing waste, incorporate recycling into everyday life

O Creating resource circulation society: Controlling waste generation and recycling, minimizing use of natural resources

* **System of resource circulation society**