

Eighth Regional 3R Forum in Asia and the Pacific

“Achieving Clean Water, Clean Land and Clean Air through 3R and Resource Efficiency- A 21st Century Vision for Asia-Pacific Communities”

Indore, Madhya Pradesh, India, 9-12 April 2018

City Report

(Draft)

< Bhavnagar, India >

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

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CITY REPORT: [City Name: Bhavnagar _____]

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 plan their existing and 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 questions and submit to the **Secretariat of the Regional 3R Forum in Asia and the Pacific** by email to 3R@uncrd.or.jp

Timeline for submission: **30 March 2018**

Secretariat of the Regional 3R Forum in Asia and the Pacific
 United Nations Centre for Regional Development

CITY REPORT: [City Name: Bhavnagar _____]	
Q 1	What are the roles of local government stipulated in the 3R-related policies, acts, laws, or regulations?
	The role of the Local Government is to develop, Implement & Monitor Policies, Laws or Regulations and acts like SWM rules - 2016
Q 2	Are 3R policies integrated in your city development strategy or master plan? (Please attach photo(s) of your city's waste management facility if available.)
	✓ Yes Bhavnagar city is emphasizing on implementation of SWM Rules – 2016 Strategies for 3R <ol style="list-style-type: none"> 1. Waste Generation Reduction <ul style="list-style-type: none"> • OWC for on-site composting • ECO Club

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2. Segregation at Source
3. Facilities for 3R
 - **Composting**
 - **Transfer Station**
 - **Waste to Energy Project**



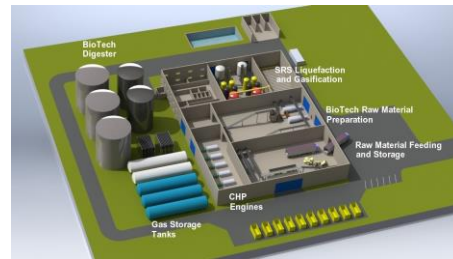
IEC Activity



IEC Activity



ECO Club in Schools



Waste to Energy Project (Proposed)

Q 3 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”)

Financial constraints:	Limited Budget
Institutional/governance challenges:	-
Policy gaps:	-

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	Other challenges such as technical capacity, human resources etc.:	<ul style="list-style-type: none"> • Lack of Technical Awareness • Insufficient Human Resources 		
Q 4	What programme is in place in your city in support of NGOs activities towards promotion of 3Rs?			
	No Programs are held in the city with the help of NGOs activities towards promotion of 3Rs			
Q 5	Is there any collaborative 3R activities/projects/partnerships involving cities (e.g., city-to-city cooperation) and organizations at international level?			
	No			
Q 6	What major future prospects or opportunities does your city have in 3R areas?			
	<ul style="list-style-type: none"> - Matru Energy Service Corporation Ltd has signed MoU with Bhavnagar Municipal Corporation for Segregating and converting Municipal Solid Waste into Electricity, Compost and RDF without residue. (Input: 300MT/day, Output: 15MW) This will reduce the requirement of Scientific Land Fill Site and Segregation. - Ultratech Cement Pvt. Ltd., Kovaya at Rajula has requested to lift 100 MT/day mixed Solid Waste from Dump Site of Bhavnagar city to use Plastic Waste in cement production process. - As per SWM Rules – 2016 Bhavnagar Municipal Corporation has banned plastic below 50 micron thickness to eliminate roots of generation of Plastic Waste in Bhavnagar City. - Bhavnagar Municipal Corporation is also reusing Plastic Waste in Manufacturing of Road. - Bulk Garbage Generator (MSW generator > 100 kg)are enforced to install in house composting by using Organic Waste Convertor. This on site composting helps to reduce handling of waste. - Bhavnagar Municipal Corporation has established Eco Club in each Municipal Schools under the authority of BMC. Students are taught not to throw waste in public area but bring the waste of individual house and submit it in the School. Solid Waste Management Department collects that waste and dispose it in proper manner. With the help of Eco Club, our city is teaching the new generations regarding awareness about the cleanliness. The school which will collect more waste will be rewarded accordingly by the BMC. 			
Q 7	What type of 3R infrastructure and facilities your city is equipped with? Please tick the appropriate.			
	Type of 3R infrastructure and facilities	Adequate/ Significant	If adequate, how many treatment	Not-adequate / Non-significant

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			facilities (in number)	
<input type="checkbox"/>	waste collection facility	√	113 Mini Tipper	
<input type="checkbox"/>	waste segregation facility			√
<input type="checkbox"/>	waste storage facility	√	1	
<input type="checkbox"/>	waste processing & treatment facility			√
<input type="checkbox"/>	resource recovery facility			√
<input type="checkbox"/>	waste recycling facility			√
<input type="checkbox"/>	waste to energy facility			√
<input type="checkbox"/>	eco-industrial zones			√
<input type="checkbox"/>	science parks/theme parks relevant to 3R			√
<input type="checkbox"/>	others (please specify:)			√
Q 8	Kindly provide the important 3R policies/programmes/projects/master plans that your City Government plans to undertake within next five years (2017-2022).			
	<ul style="list-style-type: none"> - - Waste to Energy Project - IEC Activities for Source Segregation - Ultratech Cement Pvt. Ltd, Kovaya at Rajula (For reusing Plastic Waste as alternate Fuel) - Organic Waste Convertor (For Bulk Generator) for On site Composting 			
Q 9	In response to the 2030 Agenda for Sustainable Development, in particular <i>SDG 6 (Water and Sanitation)</i>, <i>SDG 11 (Make cities and human settlements inclusive, safe, resilient and sustainable)</i> and <i>SDG 12 (Ensure sustainable consumption and production patterns)</i>, how your City is planning to advance 3R and resource efficiency related measures?			
	<ul style="list-style-type: none"> - Increasing Tree Plantation - Developing More Gardens / Circles - Construction of Transfer Station - Development of Monitoring Centers for Door to Door Waste Collection System - Establishment of CCTV in the city - Mobile Court - Improvement of Segregation at Source by distributing Blue and Green Dustbins in Residential Areas. 			

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Q 10	What are the main challenges in your city concerning clean water, clean land and clean air? (Please answer the below points)	Yes	If yes, kindly write frequency of analyzing (number per month)	No
	Do you regularly analyze the air pollution in laboratories (NOx, air particles and other pollutants)?			√
	Do you regularly analyze the water contamination through chemically and biologically test (DO, heavy metal and microbial water quality)?			√
	Do you regularly analyze the soil pollution (disposal of hazardous and chemical waste)?	√	Regularly at the Interval of Three Months	
Q 11	In response to the New Urban Agenda, in particular <i>Sustainable and inclusive urban prosperity and opportunities for all</i> and <i>Environmentally sustainable and resilient urban development</i>, how your City is planning to contribute to safe, inclusive and resilient city building related to 3R and sustainable waste management areas?			
	- With the help of Waste to Energy Project, Bhavnagar will achieve the Zero Waste status as there will be no residue after the processing of Municipal Solid Waste. Project will include a cluster of 6 Talukas if needed.			
Q 12	[For Indian cities only], how is your city linking 3R (Reduce, Reuse and Recycle) to the Swachh Bharat Mission (Clean India Mission)? Do you think circular economic utilization of all waste streams in India would accelerate faster achievement of Swachh Bharat Mission? If so, is your city equipped with required 3R policies, programmes and infrastructures towards circular economic utilization of the waste streams?			
	- Swachh Bharat Mission is a great initiative taken by Government of India. Bhavnagar city is progressing well in terms of cleanliness. Many initiatives were taken for making Bhavnagar A Clean City under the Swachh Bharat Mission. SBM has given many opportunities to make cities Clean and Green. We have achieved 33 rd rank in Swachh Survekhan – 17 in India. Bhavnagar developing new infrastructures towards circular economic utilization of the waste streams.			

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*Kindly submitted to the Secretariat of the Regional 3R Forum in Asia and the Pacific by email to 3R@uncrd.or.jp before **30 March 2018**.
Thank you for your kind cooperation.*