

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)

< Surat >

This city report was prepared by Surat 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.

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02-04 November 2016, Adelaide, SA, Australia

City Report on 3R (Reduce, Reuse, and Recycle) & sustainable waste management:

Following questionnaire to be submitted to the **Secretariat of the Regional 3R Forum in Asia and the Pacific** by email to 3R@uncrd.or.jp Secretariat of the Regional 3R Forum in Asia and the Pacific, United Nations Centre for Regional Development (UNCRD)

Timeline for submission: **15 September 2016**

City Report [SURAT, Gujarat, India]

Q 1 What are the roles of local government stipulated in the 3R-related policies, acts, laws, or regulations?

Reduce: To protect the environment by reducing different types of waste, Surat Municipal Corporation has taken many steps.

- (1) **To reduce carbon foot print** of transportation in city, SMC have expanded the network of public transport facilities by BRTS and city bus. Metro Rail project is also under consideration. Steps are being taken to encourage various modes of public transport and thereby reducing the carbon pollution of private vehicles in city.
- (2) **To reduce use of paper**, office automation, e-governance and m-governance are in place at Surat.
- (3) **To reduce wastage of water**, water conservation practices are being followed by SMC through various IEC activities.

Reuse: To protect the environment by reuse of various resources, following steps are taken by Surat Municipal Corporation.

- (1) **To reuse secondary treated sewage water**, Surat Municipal Corporation has implemented (Year 2014) India's very first 40 MLD capacity Tertiary Treatment Plant to treat secondary treated sewage water from Bamroli Sewage Treatment Plant to generate recycled industrial grade water for Pandesara GIDC Industrial Estate. It is planned to increase the present 40 MLD capacity to 80 MLD. Moreover, two more Tertiary Treatment Plants are proposed at Bhesan & Dindoli, which will be implemented in next 3 years.
- (2) **To reuse filter backwash water**, zero liquid discharge facility is being introduced now at water treatment plant.

Recycle: To protect the environment by recycling of various resources, following steps are taken by Surat Municipal Corporation.

- (1) **To recycle Plastic waste**, it is planned to collect plastic waste from homes & commercial establishments from collection centers in different zones of city by agency appointed to collect and recycle the plastic waste on BOOT basis for 20 years.
- (2) **To recycle Construction & Demolition (C&D) waste**, agency is appointed on PPP basis to collect & recycle C&D waste for 20 years.

Q 2	Is 3R policy integrated in your city development strategy or master plan? (Please attach photo(s) of your city's waste management if available.)	
	<input checked="" type="checkbox"/> Yes => Please share goals/visions/major achievements/important lessons learnt that could be replicated elsewhere. <input type="checkbox"/> No => Please go to Q6 (please also answer Q4, 5, and 7)	
<p>Photographs attached with Title. Major Achievements:</p> <p>(1) Tertiary Sewage Treatment Plant - Recycle & Reuse of Wastewater – 40 MLD capacity existing + 40 MLD capacity expansion planned (Details given in Q-1 above)</p> <p>(2) Biogas based power plant-Innovation- Operational Biogas based power plant (6 Nos. - 4.6 MW) - Total Power generation till date from Bio gas plant is 48.6 Million units.</p>		
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 constrains:	Yes
	Institutional/governance challenges:	Yes
	Policy gaps:	Yes
	Other challenges such as technical capacity, human resources etc.:	Yes
City Report [SURAT, Gujarat, India]		
Q 4	What programme is in place in your city to support NGOs activities towards promotion of 3Rs?	
	Swachh Bharat Mission "Jan-Jagriti Safai Abhiyaan" [group cleanliness drive] Litter Prevention System Nav sarjan Trust: Rag pickers Associations Surat Climate Change Trust: Waste Segregation at Source	
Q 5	Is there any collaborative 3R related activity/project/partnerships with cities and organizations at international level?	
	<input checked="" type="checkbox"/> Yes => Please brief the project(s) including objectives, project partners, target, period, budget etc. <input type="checkbox"/> No Tertiary treatment plant 40MLD recycled water used by industries. Project Partners: PPP based Target Period: Completed in 2014 Photographs with caption attached.	

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Q 6	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?		
A pilot project to be initiated to spread awareness under 100RC program, in facilitation with the new MSW 2016 Rules, to encourage source segregation and decentralized Treatment unit to Recycle and reuse.			
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	Not-Adequate/Non-significant
<input type="checkbox"/> waste collection facility <input type="checkbox"/> waste segregation facility <input type="checkbox"/> waste storage facility <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:)		<input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Q 8	Kindly provide the important 3R policies/programmes/projects/master plans that your City Government plans to undertake within next five years (2016-2021)		
<ul style="list-style-type: none"> • Smart Waste Collection system under Smart City Mission of Govt. of India • Swachh Bharat Mission 			
Q 9	In response to the 2030 Agenda for Sustainable Development, in particular SDG 11 (<i>Make cities and human settlements inclusive, safe, resilient and sustainable</i>) and SDG 12 (<i>Ensure sustainable consumption and production patterns</i>), how is your City planning to advance 3R and resource efficiency related measures?		
Surat Climate Change Trust (SCCT) is formed with support of 100 RC (Resilient Cities),			

Photographs:

Primary Collection System: Door to Door Garbage Collection System



Morden Concept of Secondary Transportation: Refuse Transfer Station- 8 Nos



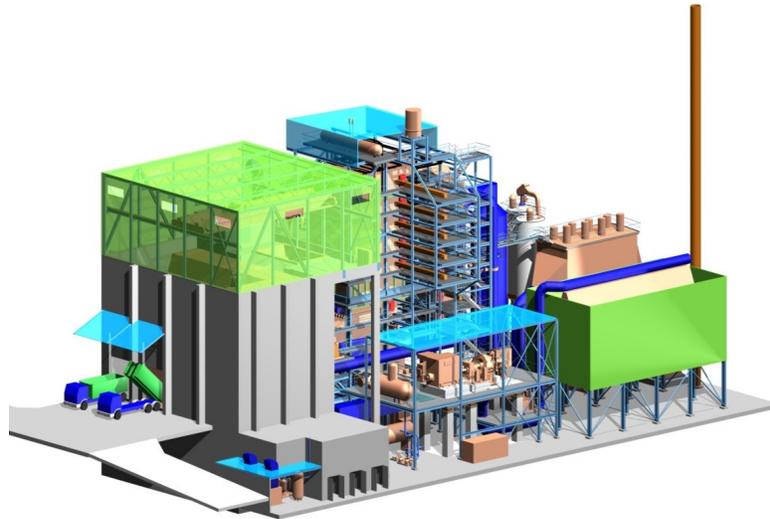
Final Disposal of MSW by Sanitary Landfill:



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Waste to Energy: 1000 TPD (Proposed-PPP)



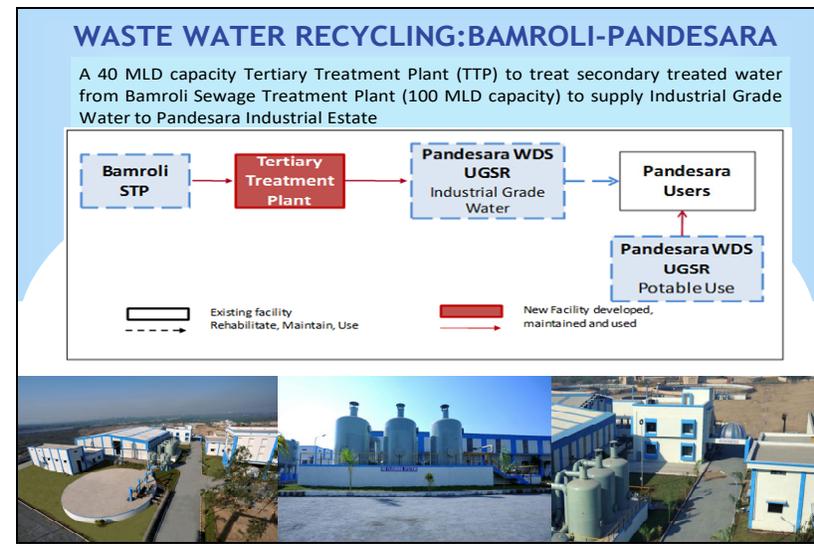
Centralized Biomedical Waste Collection, Treatment & Disposal Facility:



Plastic Waste Management Facility:



Tertiary Sewage Treatment Plant - Recycle & Reuse of Wastewater: 40 MLD



Biogas based power plant

