

Waste & Resource Management in India: Status, Challenges, Solutions and Road Map for the Future

29th September 2016 | 12:00 – 18:30 | Innovation Exchange Forum, Bombay Exhibition Centre, Hall 5, Mumbai

BACKGROUND and INTRODUCTION

With growing urban population and changing household consumption patterns, waste management is fast becoming one of the key problems of modern society due to the ever expanding volume and complexity of discarded domestic and industrial waste. Appropriate waste and resource management, under the right policy/business conditions, contributes to learning and development of capability, which in turn contributes to sound waste management practices. The sessions will address the status of solid waste policy promoting proper waste management in India. Further, the sessions will present potential solutions to the hurdles/challenges of waste management in India.

29 th September 2016, 12:00 – 13:00	
Opening High Level Session – Keynote presentations	
	Welcome Remarks - Mr. Stefan Rummel Managing Director Messe München
Speakers	Sh. Praveen Prakash Joint Sec (SBM) Ministry of Urban Development (tbc)
	Smt. Manisha Patankar Mhaiskar Secretary Urban Development Department Government of Maharashtra
	Mr. Ajay Shiram Convenor of Special Task Force on Waste Management CII (tbc)
	Mr. M. Goutham Reddy Managing Director & CEO Ramky Enviro Engineers Limited (REEL)
	Dr. Vivek Agrawal Representative of ISWA's National Member in India (Institute of Chartered Waste Managers)

FORMAT

The format of the sessions will be a “Davos style” panel, with each panelist answering guiding/targeted questions by the moderator, followed by discussion in the panel and with the audience.

Session 1: 13:00-14:00 – Solid Waste Collection and Transportation	
OBJECTIVES	
<p>Studies estimate that solid waste generation in India is approximately 115,000 tons per day with a yearly increase of about 5%. With increasing volumes, it becomes imperative that waste is properly collected and disposed. This session will discuss various government initiatives focusing on waste management issues in India and whether these schemes are compatible with the waste management needs and priorities of the country. The panelists will look at the profound linkages between the private sector and spurring innovation in collection and transportation solutions. Discussion will spin around the priorities and opportunities at the local as well as the country level, focusing on the needs of the country, building on the important work being done by multiple actors, scaling it up and making it more effective.</p>	
GUIDING QUESTIONS	
<ul style="list-style-type: none"> • What are the key government initiatives focusing on Waste Management? • How can the private sector help achieve the targets of these initiatives? • How can effective storage, collection, transfer and transport of solid waste be achieved – the role of municipalities? 	
13:00 – 13:10	Welcome Remarks
13:10 – 13:50	Panel Discussion
Panellists	Facilitator: Dr. Vivek Agrawal Chairman Institute of Chartered Waste Managers
	Ms. B. Sandhya Scientist D Chemical Department Bureau of Indian Standards
	Mr. M. Goutham Reddy Managing Director & CEO Ramky Enviro Engineers Limited (REEL)
	(tbc) Dr. Vinod Rao Commissioner Vadodara Municipal Corporation India
13:50 – 14:00	Question & Answer
	Participation from the audience

Session 2: 14:00-15:00 – Recycling and Waste Minimisation	
OBJECTIVES	
<p>This session will present and discuss viable approaches and options within the government schemes for facilitating recycling and waste minimisation solutions. It will bring together the stakeholders involved, for instance experienced practitioners and policymakers. Moreover, it will discuss and identify ways to address barriers to the deployment of sound WM recycling solutions. Accordingly, the discussion intends to provide examples demonstrating best-practices for sustainable WM. Panelists will have the opportunity to share their experiences with WM, practical results, as well as challenges and lessons learned.</p>	
GUIDING QUESTIONS	
<ul style="list-style-type: none"> • What are the main avenues for intervention within each instrument/government scheme for waste minimisation and recycling? • How to effectively distribute responsibilities between stakeholders and what involvement is needed to achieve local and national recycling aspirations? • What are the financial instruments/incentives or recycling schemes available to promote recycling of waste? 	
14:00 – 14:45	Panel Discussion
Panellists	Facilitator: Dr. Prasad Modak Executive President Environmental Management Centre LLP
	Ms. Vaishali Nandan GIZ India
	Mr. Ulhas Parlikar Director Geocycle India
	Ms. Chitra Mukherjee Head of Programmes, Operations Chintan
14:45 – 15:00	Question & Answer
	Participation from the audience

Session 3: 15:00-16:00 – Waste to Energy / Incineration
OBJECTIVES

Currently, of the estimated 62 million tonnes of MSW generated annually by 377 million people in urban areas, more than 80% is disposed of indiscriminately at dump yards in an unhygienic manner by the municipal authorities leading to problems of health and environmental degradation. The untapped waste has a potential of generating 439 MW of power from 32,890 TPD of combustible wastes including Refuse Derived Fuel (RDF), 1.3 million cubic meter of bio-gas per day or 72 MW of electricity from bio-gas and 5.4 million metric tonnes of compost annually to support agriculture. The existing policies, programs and management structure do not adequately address the imminent challenge of managing this waste which is projected to be 165 million tonnes by 2031 and 436 million tonnes by 2050.

GUIDING QUESTIONS

- What does a selection of appropriate technologies for W2E entail?
- What are the economic, financial, legal and policy risks to implementing W2E solutions?
- Which direction should India head for?

15:00 – 15:45
Panel Discussion
Panellists
Facilitator: Mr. Dirk Walther | GIZ | India

Dr. Sanjay A. Mukherjee, IAS | Additional Municipal Commissioner (Project) | Municipal Corporation of Greater Mumbai

Mr. Carsten Spohn | International technology expert | ITAD e.V.

Mr. Thomas Block | International operator | Remondis

Mr. DBSSR Sastry | Vice-President | Ramky Enviro Engineers Ltd.

15:45 – 16:00
Question & Answer

Participation from the audience

Session 4: 16:00-17:00 – Landfill Bio-mining & Land Reclamation
OBJECTIVES

Landfill mining is the process of excavating waste from operating or closed solid waste landfills, and sorting the unearthed materials for recycling, processing, or for other dispositions. Major Indian cities are facing the problem of open landfill and there is a need for sustainable solutions. This session will address the criticality of the current system of separate waste collection. Discussions will also include sources and characterization of materials and energy resources in urban spaces. Panelists will present environmental balances (life-cycle assessment) and supporting case studies.

GUIDING QUESTIONS

- What are effective techniques of waste source separation and technologies for the extraction of materials and resources?
- What are some of the recirculation pathways and market policy instruments to incentivize landfill mining across Indian cities?
- What are the economic, financial and legal aspects of landfill mining in India?

16:00 – 16:45
Panel Discussion
Panellists
Facilitator: Mr. Brijesh Patel | Managing Director | Indus Media

Mr. P. S. Awate | Ch. Eng. (SWM) | Municipal Corporation of Greater Mumbai

Mr. Nagesh Prabhu C. | Director | Zigma Global Environ Solutions Private Limited

Dr. Suneel Pandey, PhD | Director | Green Growth & Resource Efficiency Division | The Energy and Resources Institute (TERI)

16:45 – 17:00
Question & Answer

Participation from the audience

Session 5: 17:00-18:30 – Interactive open session between Indian Municipal Corporations/ industry and International technology providers	
OBJECTIVES In an open forum the interactive session shall focus on the pressing issues of Indian solid waste management. Waste2Energy is one of the main area where technological exchange is the need of the hour for municipal corporations. The forum shall enable a direct discussion between international partners, experts and the Indian stakeholders of Solid Waste management. The discussion aims to bring out best practices and possibilities of sharing technologies keeping in mind the Indian financial realities.	
17:00 – 18:30	Interactive Discussion
	Facilitator: Mr. Brijesh Patel Managing Director Indus Media

ORGANIZERS

International Solid Waste Association (ISWA) – www.iswa.org

Indus Media – <http://indus-media.com/>

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH – www.giz.de