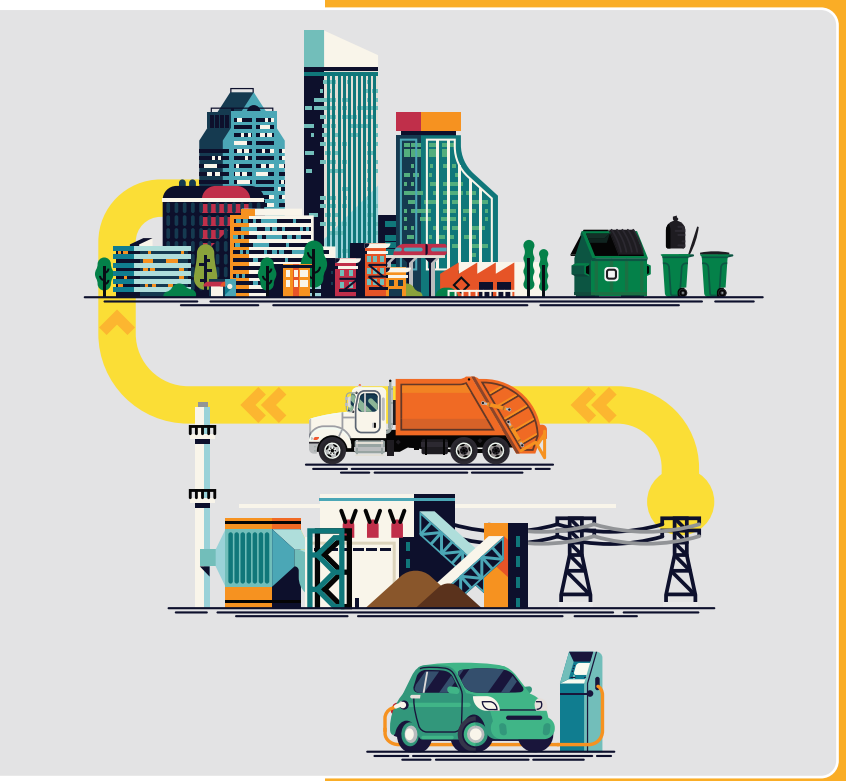
Conference on

SMART WASTE MANAGEMENT

April 5, 2018
Le Meridien, New Delhi

Lead sponsor:

ashbee | Smart Waste Management



Conference on

WASTE TO ENERGY AND FUEL

April 6, 2018
Le Meridien, New Delhi

"Early Bird" discount ends on March 16, 2018

"Register Now" and save 20 per cent

Organisers:

Indian Infrastructure | Smart Utilities | RenewableWatch

Supported by:

NSWAI

SMART WASTE MANAGEMENT

April 5, 2018, Le Meridien, New Delhi

Mission

- Management of municipal smart waste (MSW) in a scientific manner is one of the biggest issues faced by urban India. For decades, the provision of services for managing and handling smart waste has been neglected. The challenge of delivering MSW services is growing rapidly with the continuous expansion of city limits and migration from rural/semi-rural areas. With this, there has been a significant change in the quantity and quality of waste.
- Current waste management practices, despite some promising initiatives, are far from satisfactory. Barring a few large urban areas such as Ahmedabad, Surat, Pune, Hyderabad and Mumbai, smart waste management infrastructure in most cities is characterised by the absence of door-to-door collection, inadequate transportation infrastructure, dumping of waste at unapproved sites, unscientific disposal of waste, and inadequate treatment capacity.
- The situation is slowly changing with increased interest from the government and the private sector in efficient and smart waste management. Over the past few years, there has been a significant increase in the use of information technology (IT) for various aspects of waste management including collection, transportation, treatment, disposal, asset mapping, network management and customer service. This has primarily been driven by the need for efficiencies in operations, loss reduction and improvement in customer satisfaction.
- Some of the popular IT systems/solutions being deployed by urban local bodies (ULBs) include RFID-based smart bins, GPS-based tracking systems and management information systems for control and monitoring. ULBs in Amritsar, Surat, Pune, Chennai, Navi Mumbai and Chennai have been particularly active in deploying smart waste technologies.
- Further, utilities are deploying advanced systems such as smart landfill solutions, mobile applications and internet of things (IoT)-based waste management systems. Scientific disposal of waste is slowly catching attention. Waste-to-energy initiatives are gaining traction. Also, there is a renewed focus on the recovery and recycle of waste. Schemes like the Swachh Bharat Mission, the Smart Cities Mission and the Atal Mission for Rejuvenation and Urban Transformation have also laid special emphasis on improving waste management practices.
- That said, the investment requirement is huge and the sector presents sizeable opportunities. The private sector is expected to play a larger role in the creation of smart waste management infrastructure. Inherent challenges such as the absence of data, inefficiencies in user charges and poor financial health of ULBs will also need proactive attention.
- **The mission of this conference is to examine the state of the MSW sector in India, highlight new smart waste management initiatives and projects, and discuss new opportunities and key challenges. The conference will also showcase noteworthy projects and promising technologies.**

AGENDA/STRUCTURE

KEY TRENDS AND OUTLOOK

- What is the current state of MSW services?
- What are the recent trends and developments in the sector?
- What are the key issues and challenges?
- What is the sector outlook?

MoUD'S PERSPECTIVE

- What are the government's plans and perspective with regard to smart waste management in India?
- What are MoUD's programmes and incentives to promote smart waste management?
- What are the key issues?
- What are the upcoming policy initiatives in this space?

INDUSTRY PERSPECTIVE

- What are the initiatives taken by the private sector/ULBs for smart management of municipal smart waste?
- What has been the experience in terms of implementation, execution and financing of such projects?
- What are the key challenges?
- What are the opportunities for contractors, developers and technology providers in their respective cities?

SMART WASTE COLLECTION SOLUTIONS AND TECHNOLOGIES

- What are the current practices in waste collection?
- What are the smart solutions and technologies for waste collection? What are some of the noteworthy initiatives in this regard?
- What are the global best practices?
- Which of these can be adopted by Indian cities?

FOCUS ON FLEET AND ASSET MANAGEMENT

- What are the smart solutions and technologies for fleet and asset management?
- What has been the experience so far? What are the key issues and challenges?
- What are the global best practices? Which of these can be adopted by Indian cities?

FOCUS ON TREATMENT TECHNOLOGIES

- What are the technology options for waste treatment and disposal (composting, anaerobic digestion, refuse-derived fuel, etc.)?
- What role can IT play in this respect (SCADA, GIS, etc.)? What are the new functionalities and technologies being offered by the industry?
- What are some of the noteworthy projects? What are the key learnings?

ROLE OF ICT IN WASTE MANAGEMENT

- What role can ICT play in smart waste management (mobile applications, online bill payment, grievance redressal, intelligent remote monitoring, etc.)?
- What are some of the noteworthy initiatives in this regard? What specific benefits can ULBs draw from these initiatives?
- What are the emerging global trends?

FOCUS ON LANDFILL MANAGEMENT

- What are the current practices in landfill management?
- What role can technology play in landfill management?
- What has been the experience so far? What are the global best practices?

SMART WASTE RECYCLING SOLUTIONS

- What are the current practices in waste recycling and reuse?
- What are some of the IT solutions in use? What are the key issues?
- What are the best practices globally and which ones are relevant to Indian needs?

Target Audience: The conference is targeted at officials and managers from:

ULBs/Municipalities
Waste management companies
Waste collection companies
Waste sorting, recycling and service companies
Waste transportation companies
Waste storage and handling companies
Certification and inspection companies
Policymakers and regulators
Equipment manufacturers
Public health departments
Technology providers
Financial institutions
Facility management companies
Relevant government agencies
Consulting organisations
State infrastructure development corporations
Environment consulting and solutions firms
Pollution control boards (central and state)
Research and development organisations
Etc.

WASTE TO ENERGY AND FUEL

April 6, 2018, Le Meridien, New Delhi

Mission

- India has tremendous potential to produce energy from the residue of municipal solid waste (MSW), the processing and cement industries, and agriculture. According to industry estimates, India produces over 151,816 tonnes per day (tpd) of smart waste, which has the potential to generate over 1,100 MW of power.
- However, most cities in the country lack proper segregation, transportation and storage facilities to tap this potential. Only 23 per cent of the total waste generated is processed. Moreover, in most cities, collection services are not extended to unauthorised and remote settlements, which are either inaccessible or lack the capacity to pay for these services.
- Currently, India has more than 33 waste-to-energy (WtE) plants with a cumulative installed capacity of over 275 MW. Apart from a few successful examples, most of these projects are struggling to cope with regulatory impediments and local unrest.
- Nevertheless, a number of significant developments have taken place over the past two to three years. The government has launched different programmes for the support and promotion of WtE in India. Under the Swachh Bharat Mission, one of the key components is the development of WtE facilities with central support of up to 20 per cent of the project cost. The Ministry of New and Renewable Energy is also implementing a programme on Energy Recovery from MSW. A financial assistance of Rs 20 million per MW, subject to a maximum of Rs 100 million per project, is provided for WtE projects.
- The pace of technology adoption in the WtE segment has also improved over the years. Urban local bodies (ULBs) are deploying advanced control and automation solutions for WtE facilities. In the waste treatment segment as well, new technologies such as pyrolysis and gasification are being adopted. Further, ULBs are taking steps to ensure proper collection and transportation of biodegradable, recyclable and other high-calorific value waste directly to the processing facility.
- Going forward, a continuous increase in the country's population, coupled with increasing public health and environmental concerns, will create substantial demand for WtE facilities. Another factor that would boost investments in the WtE segment is strong government support. In the next two to three years, at least 31 WtE plants with a potential to generate over 240 MW of energy from waste are expected to become operational.
- As the WtE market matures, more advanced technologies and processes are likely to be developed to provide efficient and low-cost solutions. This is expected to attract more private sector participation that will result in increased opportunities for technology providers for business collaborations and linkages.
- **The mission of this conference is to examine the state of the WtE segment in India, analyse key trends and developments, highlight new government programmes, and discuss new opportunities and key challenges. The conference will also showcase noteworthy projects and promising technologies.**

AGENDA/STRUCTURE

KEY TRENDS AND OUTLOOK
- What is the current scenario of the WtE segment in India (in terms of total installed capacity, energy generation, etc.)?
- What are the recent trends and developments in the WtE segment?
- What are the key issues and challenges?
- What is the sector potential?

GOVERNMENT PERSPECTIVE
- What are the government's plans and perspective with regard to WtE in India?
- What are the major government programmes and incentives to promote WtE projects?
- What are the key issues? What are the upcoming policy initiatives in this space?

ULBS' PERSPECTIVE
- What is the current state of the WtE segment in your city? What has been the experience so far?
- What are the trends in tariff/tipping fee, revenue collection, and capital and operations and maintenance expenditure?
- What are the key issues? How are they being addressed?

DEVELOPERS' PERSPECTIVE
- How has been the experience of developers' so far?
- What are the different PPP models used for WtE projects?
- What are the operational constraints being faced by the industry?
- What are the expectations from ULBs and the government?

REGULATION AND COMPLIANCE
- What are the standards and norms for energy recovery from waste?
- What steps are being taken by developers/operators to ensure compliance with norms?
- What can the industry expect in terms of future standards and norms?

FINANCING OF WTE PROJECTS
- How has WtE financing evolved? What is the financiers' perception of the sector?
- What are the new and innovative financing structures for WtE projects?
- What are the key sources of revenue? What are the new revenue options being explored?

WASTE TO FUEL
- What has been the experience so far with conversion of waste to fuel (petrol/gasoline, diesel, jet fuel, etc.) in India?
- What are the various technologies being adopted in this area?
- What are the global best practices?

FOCUS ON TECHNOLOGY
- What are the prevalent WtE technologies? What are their key features (per unit energy production, capex and opex requirements, other byproducts, etc.)?
- What are the emerging technologies?
- What are the best practices followed globally?
- What are the opportunities for technology providers?

EQUIPMENT SHOWCASE
- What are the key trends in the equipment market?
- What are the recent developments and innovations in India and globally?
- What are the key issues and challenges? What are the market opportunities?

PROJECT SHOWCASE
- What are some of the noteworthy WtE projects?
- What are their key characteristics? What is the financing pattern?
- What are the key challenges and what lessons can be learnt?

ROLE OF IT AND AUTOMATION IN PLANT OPERATIONS AND MANAGEMENT
- What is the role of IT and automation in WtE plant operations and management?
- What is the current state of IT adoption in the WtE segment?
- What are the emerging requirements?
- What are the key issues and challenges?

MARKET FOR WASTE RESIDUES/BYPRODUCTS (green energy, refuse-derived fuel, manure, fly ash, etc.)
- What types of residues or byproducts are generated from WtE plants?
- What are the key applications of these products? What are the costs and returns?
- What are the key issues and challenges? How are they being addressed?

Target Audience: The conference is targeted at executives, managers and decision makers from:

- ULBs/Municipalities
- Policymakers and regulators
- Technology providers
- Research and development organisations
- Environment consulting and solutions firms
- Gencos, transcos and discoms
- Renewable energy developers
- Relevant government agencies
- Power trading companies
- Facility management companies
- Consulting organisations
- Independent power producers
- Financial institutions
- Captive plant operators
- Certification and inspection companies
- Automobile companies

Previous participants at related conferences

A2Z Infrastructure, AECOM, Ahmad Nagar Municipal Corporation, Ahmedabad Municipal Corporation, Alom Poly Extrusions, Aparna Constructions and Estates, Aparna Property Management Services, APITCO, AUMA, Balurghat Municipal Corporation, Bangalore Water Supply & Sewerage Board, BASF India, Basix, BHEL, Bhavnagar Municipal Corporation, Bhubaneswar Municipal Corporation, Black & Veatch, Bosch, Brasten Group, C.R.I Pumps, CDE Asia, Central Pollution Control Board, CPWD, CETCO, CH2MILL, Chennai Municipal Corporation, Clearford Water Systems, Coimbatore Corporation, Consortium for DEWATS Dissemination Society, Consulting Engineering , CPCB, CPHEEO MOUD, CPWD, Creative Enterpreneurs, CRISIL Infrastructure Advisory, CSIR- IGIB, DJB, DMRC, Delhi Pollution Control Committee, Delhi State Industrial and Infrastructure Development Corporation, Deloitte Touche Tohmatsu, DHR Holding India, Dyal Singh College University of Delhi, Ecofil , Electrosteel Castings, EIL, Enviro Analysts & Engineers, Evio, Excel Industries, Forbes Marshall, Garware-Wall , GIZ, GNIDA, Greater Noida Industrial Development Authority, GSE Lining Technology, Gujarat International Finance Tec-City Company, Gujarat Pollution Control Board, Gurgaon Municipal Corporation, Hach Company, Hanjer Biotech Energies, Hindustan Organic, Hitachi Zosen, Howrah Municipal Corporation, IDBI Bank, IFC, IIDCC(G), IIT Delhi, IL&FS , Indore Municipal Corporation, IPE Global, IREO, Jain Irrigation Systems, Jamshedpur Utilities & Services Company, Jash Engineering, JITF Water Infrastructure, Kalyani , Kanpur Municipal Corporation, Kharagpur Municipality, Kirloskar Brother, Kishore Pumps, Kivar Environ, Kohler, Kozikhode Municipal , KSB Pump, L&T Valves, M.P. Audyogik , Mahagenco, Maharashtra Pollution Control Board, Maple Orgtech, McElroy Sales and Service, McNally Bharat Engineering Company, Membrane Hitec, Ministry of Urban Development, Ministry of Water Resouces, MMRDA, MoUD, Municipal Corporation Gurgaon, Municipal Corporation of Delhi, Nagar Palika Parishad Kannauj, Nashik Municipal Corporation, NBCC, National Institute of Urban Affairs, National Mission For Clean Ganga, NPCC, NDMC, Niti Aayog, NJS Consultants, NJS Engineers, NTPC, ONGC, Organica Water, Pimpri Chinchwad Municipal Corporation, Praj Industries, Premier Tech Aqua Systems, Punjab Pollution Control Board, Ramky, Rehau Polymers, Rex Polyextrusion, SAIP, Schwing Stetter, Sekisui Asia Pipe solutions, Sekisui Chemical , Sekisui Rib Loc Australia, SFC Environmental Technologies, Shah Technical Consultants, Shubham Acqualink, Siliguri Municipal Corporation, SMS Envocare, SNC-Lavalin Infrastructure, Spatial Ideas, SREI, Srinagar Municipal Corp., Sulabh International Social Service Organisation, Suyash Kraft & Papers, Suzalkem Technologies, TCE, TATA Projects, Tata Sevices, Technofab Engineering, Teyma India, Thane Municipal Corporation, Trimex Industries, The World Bank, Town and Country Planning Organisation Ministry of Urban Development, Tractors India, Triveni Engineering & Industries, U.P. Jal Nigam, UP Jal Nigam Allahabad, UP Jal Nigam Ghaziabad, UPES, V. Automat & Instruments, VA Tech Wabag, Vishvaraj Infrastructure, Voltas, WaterHealth India, WILO Mather and Platt Pumps, Wipro Enterprises, Xylem Water Solutions, etc.

Cover pic courtesy: shutterstock images

REGISTRATION FORM

☐ I would like to register for the **"SMART WASTE MANAGEMENT"** conference **(April 5, 2018, Le Meridien, New Delhi)**

☐ I would like to register for the **"WASTE TO ENERGY AND FUEL"** conference **(April 6, 2018, Le Meridien, New Delhi)**

☐ I would like to register for **both the conferences**

I would like to register for the conference. I am enclosing Rs_____ vide cheque/demand draft no._____ drawn on _____dated _____ Company GST No. _____in favour of India Infrastructure Publishing Pvt. Ltd. payable at New Delhi.

Please send wire transfer payments to:

Beneficiary	India Infrastructure Publishing Private Limited
Bank Name	The Hongkong and Shanghai Banking Corporation Ltd
Bank Address	R-47, Greater Kailash-1, New Delhi-110048, India
Bank Account No.	094179587002
Swift Code	HSBCINBB
IFSC Code	HSBC0110006
GSTIN	07AAACI5880R1ZV

Sponsorship opportunities are available

REGISTRATION FEE

ANY ONE CONFERENCE

	Discounted fee (before March 16, 2018)				Fee without discount (after March 16, 2018)			
Delegates	INR	GST @18%	Total INR	Total USD	INR	GST @18%	Total INR	Total USD
One delegate	9,600	1,728	11,328	189	12,000	2,160	14,160	236
Two delegates	16,000	2,880	18,880	315	20,000	3,600	23,600	393
Three delegates	22,400	4,032	26,432	441	28,000	5,040	33,040	551

BOTH CONFERENCES

	Discounted fee (before March 16, 2018)				Fee without discount (after March 16, 2018)			
Delegates	INR	GST @18%	Total INR	Total USD	INR	GST @18%	Total INR	Total USD
One delegate	16,000	2,880	18,880	315	20,000	3,600	23,600	393
Two delegates	25,600	4,608	30,208	503	32,000	5,760	37,760	629
Three delegates	35,200	6,336	41,536	692	44,000	7,920	51,920	865

- **Delegate fee is inclusive of 18 per cent GST.**
- **There is a special low fee of Rs 3,000 per participant for urban local bodies, state owned regulatory authorities, academic and research institutions and government agencies (not public sector corporates).**
- **The fee will be Rs 5,000 per participant for those attending both the conferences.**

Payment Policy:

- Full payment must be received prior to the conference.
- Payments for "early bird" registrations should come in before the last date of discount.
- Conference fees cannot be substituted for any other product or service being extended by India Infrastructure Publishing Pvt. Ltd.
- Conference fee includes lunch, tea/coffee and conference material.

Organisers

*The conference is being organised by **India Infrastructure Publishing**, a leading provider of information on the infrastructure sectors through magazines, newsletters, reports and conferences. The company also publishes **Indian Infrastructure**, **Smart Utilities** and **Renewable Watch** magazines. It also publishes series of reports on the infrastructure sectors including **Water and Wastewater in India**, **Industrial Water Sector**, **Municipal Water Sector**, **Sewage Treatment Market in India** and **Municipal Solid Waste in India**, etc. It also publishes **Urban Water & Sanitation News** (a weekly newsletter) and the **Water Industry Directory & Yearbook**.*

Contact: Naorem Yaiphaba, Conference Cell
India Infrastructure Publishing Pvt. Ltd., B-17, Qutab Institutional Area, New Delhi 110016.
Tel: +91-41034610, 41034615, 9971722464 | Fax: +91-11-26531196, 46038149 | E-mail: conferencecell@indiainfrastructure.com