

3rd Edition

A VIRTUAL CONFERENCE

WATER NETWORK MANAGEMENT

New Requirements and Technologies;
Challenges and Future Strategies

October 6, 2020



Associates:



A VIRTUAL CONFERENCE

SOLID WASTE MANAGEMENT

Emerging Trends & Requirements;
New Initiatives and Best Practices

October 7, 2020

Associate:



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WATER NETWORK MANAGEMENT

Mission

- Recognising the need for modern infrastructure facilities and improved service delivery, a number of urban local bodies (ULBs) have turned to advanced technological solutions for efficient water network management.
- Over the past decade or so, most ULBs have launched projects to deploy advanced flow and pressure management systems, leak detection devices, and asset management systems. In addition, SCADA systems, GIS, satellite surveillance and remote sensors are being deployed for monitoring collection, distribution and treatment systems.
- The results of these initiatives have been quite encouraging. Cities such as Mumbai, Delhi, Ahmedabad, Surat and Pune have been witnessing impressive growth rates on most key parameters. These include bill collection efficiency, a reduction in non-revenue water (NRW), water availability and quality, metering of connections and leakage control.
- Some of the successful initiatives are the launch of a revenue management system in Delhi, a water loss management project in Bengaluru and a 24x7 water supply project in Nagpur, as well as the installation of a tertiary treatment plant in Surat.
- A few cities have engaged private entities to improve service delivery and introduce professional and technical expertise in water supply management. This has resulted in some noteworthy improvements in operational performance such as a reduction in water losses, expansion of the customer base and an improvement in the billing and revenue collection mechanisms.
- The government, too, is making concerted efforts to improve water network management practices through its flagship schemes such as the Smart Cities Mission and the Atal Mission for Rejuvenation and Urban Transformation (AMRUT). In the past one to two years, there have been noticeable improvements in water network management at the city level, primarily in terms of projects undertaken, capacity addition, and technologies and best practices adopted. However, the Covid-19 pandemic has put a halt on ongoing and planned projects across the country. It has resulted in liquidity constraints, pressure on supply chains, shortage of labour and cost overruns.
- While the sector is seeing some improvement, the pace of change needs to be accelerated. The private sector needs to play a larger role in driving the trend of technology innovation. There is great scope for improving service delivery across the sector, and there is a huge opportunity in scaling up infrastructure. For this to happen, charges have to be rationalised. Above all, the orientation of ULBs must change - from that of mere facilitators for capacity creation to service providers striving to meet the needs of citizens.
- **The mission of this conference is to examine the state of water network management in Indian cities with a focus on strategies and solutions for minimising NRW and improving service delivery, identify the potential strategies to fast-track implementation, and highlight the near and medium-term outlook for the segment. The conference will also discuss noteworthy initiatives/best practices, highlight upcoming opportunities, as well as showcase the latest technologies and equipment.**

Target Audience

- The conference is targeted at officials and managers from:
 - ULBs and relevant government bodies
 - Water network management companies
 - Policymakers and regulators
 - Leak detection agencies
 - Urban planning and development agencies
 - Instrumentation and monitoring solution providers
 - Water meter manufacturers
 - Other technology providers
 - Consulting firms
 - Commercial and industrial units
 - Pipeline construction firms
 - Civil work contractors
 - Steel and stainless-steel producers
 - Bulk water suppliers
 - Etc.

AGENDA/STRUCTURE

EMERGING TRENDS, IMPACT OF COVID-19 AND FUTURE OUTLOOK

- ❖ What are the recent trends and developments in water network management in Indian cities (24x7 water supply, NRW, metering, etc.)?
- ❖ What has been the progress under key programmes and incentives to promote water network management (AMRUT and the Smart Cities Mission)? What has been the impact of Covid on project implementation, funding and timelines?
- ❖ What are the new and emerging opportunities and the future outlook?

ULB PERSPECTIVE: NOTABLE INITIATIVES, OPPORTUNITIES AND CHALLENGES

- ❖ What is the current state of water supply services in Indian cities? What are the current revenue losses resulting from NRW?
- ❖ What has been the progress on water network management projects and initiatives? What are the upcoming projects and opportunities?
- ❖ What are the new and emerging utility challenges pre- and post-Covid?

SPOTLIGHT ON 24X7 WATER SUPPLY: EXPERIENCE, KEY LEARNINGS AND NEW PROJECTS

- ❖ What are some of the noteworthy 24x7 water supply projects? What has been the implementation experience and what are the key learnings?
- ❖ What role can technology play in achieving round-the-clock water supply?
- ❖ What is the relevance of these projects in the Indian scenario? What is the way forward?

PRIVATE SECTOR PARTICIPATION: EXPERIENCE SO FAR & FUTURE POTENTIAL

- ❖ What has been the private sector experience in water network management?
- ❖ What are some of the successful PPP projects? What have been the key learnings and the experience so far?
- ❖ What are the key risks and challenges? What are the new opportunities and prospects for private players?

FOCUS ON PIPELINE INFRASTRUCTURE

- ❖ What is the current state of water pipeline infrastructure in Indian cities?
- ❖ What are the some of the noteworthy initiatives/projects being taken up for pipeline replacement and rehabilitation?
- ❖ What are the new technologies/solutions available for monitoring pipelines? What is the impact of these solutions on asset reliability, failure and maintenance?

LEAKAGE DETECTION TECHNOLOGIES AND INITIATIVES

- ❖ What are the different technologies and solutions available for water leakage detection?
- ❖ What are some of the noteworthy initiatives? What has been the implementation experience and challenges?
- ❖ What are the recent advancements and innovations in this space?

METERING PRACTICES: CURRENT DEPLOYMENT AND FUTURE OUTLOOK

- ❖ What are the current metering solutions deployed by water utilities (ultrasonic flow meters, AMR meters, GSM flow meters, etc.)?
- ❖ What are some of the noteworthy initiatives? What are the upcoming projects/initiatives under the Smart Cities Mission?
- ❖ What are the new trends and advancements in this field? What are the key challenges?

NRW REDUCTION AND REVENUE MANAGEMENT SYSTEMS

- ❖ What are the key strategies and measures adopted for NRW reduction? What are the key benefits of deploying a revenue management system?
- ❖ What have been the learnings and experience so far in the adoption of such systems?
- ❖ Are ULBs fully exploiting and using the data captured by these systems? What are the key issues and challenges?

FOCUS ON O&M, ASSET MANAGEMENT AND REMOTE MONITORING (GIS, SCADA, CRM, SENSORS, ETC.)

- ❖ What is the role of IT and automation systems in the O&M of water supply systems? What has been implementation experience and learnings?
- ❖ What are the new and emerging asset management-related requirements due to Covid-19 (artificial intelligence, blockchain, robotics, IoT, big data, etc.)?
- ❖ What are the issues and concerns? What is the way forward?

FOCUS ON TREATMENT TECHNOLOGY

- ❖ What are the most prevalent technologies for municipal water treatment (coagulation and flocculation, clarifier, membrane filtration, etc.)?
- ❖ Which technologies have been more successful (in terms of cost effectiveness, footprint, plant performance, quality of treatment, etc.)?
- ❖ How is the industry gearing up to meet the requirements of the water sector? What are the key challenges being faced due to Covid-19?

SOLID WASTE MANAGEMENT

Mission

- Waste generation levels are expected to more than double by 2030 with the urban population also doubling. This has made it crucial for the government to put in place effective means of municipal solid waste (MSW) management. The sector has already witnessed incredible growth in the past few years on the back of an increasing focus on the environment and resource recovery.
- ULBs have undertaken the deployment of smart bins, sorting machines, global positioning systems-based tracking systems, geographic information systems-based asset mapping, and management information systems for controlling and monitoring purposes.
- Further, greater emphasis is being laid on door-to-door collection, waste segregation at source, and the setting up of integrated waste management facilities, scientific landfills and waste-to-energy (WtE) plants. New projects and capacities are also being added under various government programmes.
- Of the total 54.4 million tonnes per annum of MSW being generated, about 60 per cent is processed. About 95 per cent of the wards have a door-to-door collection system and about 75 per cent have a segregation system. Some cities such as Indore, Visakhapatnam, Pune and Bhopal are segregating waste in all the wards.
- Meanwhile, small towns and cities such as Kanpur, Ranchi and Mathura have witnessed increased private sector participation. This has resulted in improved operational efficiency and the deployment of advanced technologies.
- The Covid-19 pandemic has, however, presented new challenges for waste management with a substantial increase in the generation of medical waste as infection cases rise. Greater emphasis is being laid on the deployment of IT solutions for effective waste management with minimum human interference. Besides, projects have witnessed delays on account of factors such as a shortage of raw materials and labour.
- While considerable improvements have been made for waste management in the country, progress is far from satisfactory. Thus, the private sector's role is becoming more important in bringing in investments for innovations in waste treatment and efficient O&M of infrastructure. To bring about a major shift, there is a need to address issues such as the absence of source segregation, financial constraints, shortage of skilled manpower, lack of proper planning by the authorities, poor enforcement of rules and low awareness among citizens.
- The mission of this conference is to examine the state of the MSW sector in India, analyse new and emerging challenges during and post Covid, identify the potential strategies to fast-track project implementation, and highlight the near and medium-term outlook and opportunities in the waste management sector. The conference will also showcase recent innovations in technology and equipment.

Target Audience

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

AGENDA/STRUCTURE

EMERGING TRENDS, IMPACT OF COVID-19 AND FUTURE PROSPECTS

- ❖ What are the notable trends and developments in the waste generation, collection, treatment and disposal segments?
- ❖ What has been the progress under key programmes for effective solid waste management (AMRUT, Smart Cities Mission, Swachh Bharat Mission, etc.)?
- ❖ What is the future outlook? What are the key issues and challenges?

ULB PERSPECTIVE: CURRENT STATE, NEW INITIATIVES, OPPORTUNITIES AND CHALLENGES

- ❖ What is the current state of SWM services in your city?
- ❖ What are the recent initiatives and noteworthy projects?
- ❖ What are the new and emerging requirements of utilities during and post Covid?
- ❖ What are the upcoming projects and opportunities?

GOVERNMENT INITIATIVES: EXPERIENCE, PROGRESS, NEW PROJECTS AND OPPORTUNITIES

- ❖ What are the key initiatives being taken by the government for waste management?
- ❖ What has been the progress so far on the Smart Cities Mission and the Swachh Bharat programme?
- ❖ What steps are being taken to fast-track project implementation in light of Covid-19?
- ❖ What are the future targets and upcoming opportunities?

PRIVATE SECTOR PARTICIPATION: EXPERIENCE SO FAR & FUTURE POTENTIAL

- ❖ What has been the private sector experience in the SWM segment?
- ❖ What are some of the successful PPP projects? What have been the learnings and the experience so far?
- ❖ What factors determine the business viability of SWM projects? What are the capex and opex requirements?
- ❖ What are the key risks and challenges? What are the new opportunities and prospects for private players?

FOCUS ON WASTE TO ENERGY AND GREEN FUELS

- ❖ What is the installed WtE capacity in India? What are the most prevalent WtE technologies?
- ❖ What are some of the noteworthy projects in the WtE space?
- ❖ What has been the experience so far with the conversion of waste into green fuel in India (bio-CNG, bio-diesel, etc.)?
- ❖ What are the upcoming projects and opportunities?

KEY FOCUS AREAS: NOTABLE TRENDS, EMERGING TECHNOLOGIES AND NEW OPPORTUNITIES

BIOMEDICAL WASTE MANAGEMENT

- ❖ What has been the impact of Covid-19 on biomedical waste generation?
- ❖ What are the collection, treatment and disposal practices being followed by Indian cities?
- ❖ What are some of the noteworthy initiatives in this space?
- ❖ What role can technology and IT solutions play in effective biomedical waste management?

COLLECTION AND TRANSPORTATION INFRASTRUCTURE

- ❖ What is the state of waste collection and transportation infrastructure in Indian cities?
- ❖ What are some of the noteworthy initiatives in this space? What are the new technologies and smart solutions being deployed?
- ❖ What are the upcoming projects and opportunities?
- ❖ What are the key challenges?

PROCESSING AND TREATMENT INFRASTRUCTURE

- ❖ What is the state of the waste processing and treatment infrastructure in Indian cities?
- ❖ What are some of the noteworthy initiatives in this space? What are the new technologies and smart solutions being deployed?
- ❖ What are the upcoming projects and opportunities?
- ❖ What are the key challenges?

DISPOSAL AND RECYCLING (3R) PRACTICES

- ❖ What are the current practices for waste disposal and recycling in Indian cities (scientific landfill, 3R, etc.)?
- ❖ What are some of the noteworthy initiatives in this regard? What are the smart solutions and technologies for waste disposal and recycling?
- ❖ What are the upcoming projects and opportunities?
- ❖ What are the key challenges?

O&M AND ASSET MANAGEMENT TECHNOLOGIES

- ❖ What is the role of IT and automation systems in the O&M of waste management assets?
- ❖ What are the most promising technologies/solutions (GIS, SCADA, smart bins, geo-tagging, etc.)? What are the emerging requirements in light of the Covid-19 pandemic?
- ❖ What are the upcoming opportunities?

Previous participants

The companies that participated in our previous conferences on “Water Network Management” & “Solid Waste Management” include:

Afcons, Agra MC, Ahmedabad MC, AIUT Technologies, Antony Waste, Aparna, Aquatech, Ashbee, Auma , Avery , Bangalore International Airport, Bangalore Water SSB, Bank of America, BASF, Bentley Systems, Bhagalpur Smart City, BHEL, Black & Veatch, Borouge , Bosch, Breivoll-Inspection Technologies, Care RATINGS, CDD, Central Ground Water Board, CESC, Chanderpur Works, Chandigarh MC, Citec Engineering, Contract Management Project Management, Creative Entrepreneurs LLP, CRI Pumps, CRIS, CRISIL, CWC, Delhi Jal Board, Dhariwal Infrastructure, DHI , DSIIDC, DTK Hydronet Solutions, Durgapur MC, East Delhi MC, Ecogreen Energy, Electrosteel Casting, Encito Advisors, Energy & Financial Management Consultant, Environmental Technologies, EPTISA, Essar Power, Essel Infra, EVIO, Fair Flow, Finance Tec-City, Forbes Marshall, Gannon Dunkerley, GE Water, Ghaziabad MC, GKW Consult GmbH, Greater Chennai Corporation, Grundfos Pumps , Gujarat International, GSECL, Gurugram Metropolitan Development Authority, Haryana PWD (B&R), HEG, Heuristech Labs, Hitachi , HPD Consultants, iDeck, IL&FS, Indian Hume Pipe, IFC, Itron, Jackson, Jain Irrigation, Jash Engineering, JCB, JFE Engineering, JK Cement, JSPL, JUSCO, JWIL Infra, Kabadiwalla Connect, Kalpataru Power, Kamstrup, Kanpur MC, Keelakarai Town Development Trust, Kishor Pumps, Kohler, KSB Pumps, L&T Construction, L&T Valves, Loni Nagar Palika, Lucknow Nagar Nigam, MagikMinds, Maruti Suzuki, Maski, Mather & Platt Pumps, MC Dharamshala, MC Karnal, MC Moradabad, MC Yamunanagar, McElroy Sales & Service, Ministry of New and Renewable Energy, Ministry of Water Resources, Mitsubishi Hitachi Power, Mukand Poly Products, NabaDiganta Water Management, Nagar Nigam Ghaziabad, Nagar Nigam Varanasi, Nagar Palika Nigam Ujjain, Nagar Palika Parishad Mathura, Nagar Palika Parishad Modinagar, Nagpur Environmental Services, Nagpur Smart City, Nangloi Water Services, National Institute of Urban Affairs, National Mission for Clean Ganga, NCC, NDMC, NITI E-Mumbai, NJS, NPCC, NTPC, ONGC, Organica Water, Paharpur Cooling Towers, Pimpri-Chinchwad MC, Praj, PricewaterhouseCoopers, Public Health Engineering Department, Public Works Department, Pune MC, Punjab Pollution Control Board, Punjab Water SSB, PWD, Rajkot MC, Ramboll, Reliance Industries, Retas Enviro Solutions, Rex Polyextrusion, Ridings Consulting Engineers, Royal Danish Embassy, Royal Haskoning DHV, Sagar MC, Schwing Stetter, Secure Meters, Sensus, SFC, Shah Technical Consultants, Shubham Acqualink, Siemens, Smart Energy Water, SMS Envocare, SPML Infra, Sterling & Wilson, STUP Consultants, Swach Environment, Tata Communications, Tata Consulting Engineers, Tata Institute of Social Sciences, Tata Metaliks, Tata Power, Tata Projects, Technofab, Technofab Engineering, Temflo Systems, TERI, Terpl, Thane MC, Thermax, Tirupati MC, Town and Country Planning Organisation, Town Municipal Council, UK Trade & Investment, Unicon ZSK, Uniper Technologies, UP Jal Nigam, URS , VA Tech Wabag, VAG-Valves, VEGA , Venkraft Paper Mills, Vishvaraj Infrastructure, Voltas, Water Health, Wegot Utility Solutions, Weir Minerals, WILO, Wipro Water, World Bank, Xylem Analytics South Asia, Xylem Water Solutions, ZENNER Aquamet, etc.

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 publishes Indian Infrastructure, Smart Utilities and Renewable Watch magazines. It also publishes a series of reports on the infrastructure sectors including Water Market in India, Sewage Treatment Market in India, Municipal Solid Waste in India, Desalination Market in India and Wastewater Treatment & Reuse Market in India. It also publishes Urban Water & Sanitation News (a weekly newsletter) and the Water Industry Directory & Yearbook.

REGISTRATION FORM

- I would like to register for the “WATER NETWORK MANAGEMENT” conference (October 6, 2020)
- I would like to register for the “SOLID WASTE MANAGEMENT” conference (October 7, 2020)
- I would like to register for **both the conferences**

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Registration Fee

Both conferences

	INR	GST@18%	Total INR	Total USD
1 Login	9,000	1,620	10,620	150
2 - 3 Logins	15,000	2,700	17,700	250
4 - 5 Logins	21,000	3,780	24,780	350
6 - 9 Logins	27,000	4,860	31,860	450
10 - 20 Logins	33,000	5,940	38,940	550

Any one conference

	INR	GST@18%	Total INR	Total USD
1 Login	6,000	1,080	7,080	100
2 - 3 Logins	10,000	1,800	11,800	170
4 - 5 Logins	14,000	2,520	16,520	240
6 - 9 Logins	18,000	3,240	21,240	300
10 - 20 Logins	22,000	5,400	25,960	370

- GST @18 per cent is applicable on the registration fee.
- Registration will be confirmed on receipt of the payment.

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. Discount offers cannot be combined with any other offer.
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